

University of Southampton Research Repository

Copyright © and Moral Rights for this thesis and, where applicable, any accompanying data are retained by the author and/or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This thesis and the accompanying data cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder/s. The content of the thesis and accompanying research data (where applicable) must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holder/s.

When referring to this thesis and any accompanying data, full bibliographic details must be given, e.g.

Thesis: Author (Year of Submission) "Full thesis title", University of Southampton, name of the University Faculty or School or Department, PhD Thesis, pagination.

Data: Author (Year) Title. URI [dataset]

UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL AND HUMAN SCIENCES

SCHOOL OF EDUCATION

**Understanding Message Framing for Online Teachers' Professional Development:
Educational Affordances of Dyslexia Awareness in Malaysia.**

by

Aida Binti A. Rahman

Thesis for the degree of Doctor of Philosophy

May 2019

ABSTRACT

Despite the efforts to prepare Malaysian teachers to support students with learning difficulties, little empirical knowledge exists that can be used to guide the provision of effective online Teacher Professional Development [oTPD] on dyslexia. The review of the literature on the studies of framing suggest that analysis of framing effect could facilitate a researcher to achieve a better understanding of an effective Teacher Professional Development. This study of teachers' responses to training materials aims to understand how dyslexia awareness messages are framed in online resources to trigger Malaysian primary school teachers to inquire more information about dyslexia conception and dyslexia supports. This understanding was achieved by analysing the triggering events as the framing effects and how the frames and the framing of the messages contribute towards the identified triggering events.

The study is divided into two main phases that are carried out sequentially: the pre-message framing phase [to identify the participants' knowledge gap] and the message framing phase [to understand how the messages are framed to trigger the participants to inquire of more information about dyslexia]. The pre-message framing phase aims to answer the first research question [what is the level of dyslexia awareness among Malaysian primary school teachers?]; while the message framing phase aims to answer the second research question [which message/messages triggered the teachers' awareness and learning about dyslexia?] and the third research question [how are the messages framed to trigger the participants' awareness and learning inquiry?]. The main phase of the study is the message framing phase. However, the findings from the pre-message framing phase is vital to inform the selection of the artefacts to be utilised in the study of the framing effects [which addressed the second research question] and the message frames [which addressed the third research question].

The data for this study were collected from fifteen participants via WhatsApp instant messaging interviews and were analysed using a hybrid approach of inductive and deductive thematic analysis. The findings revealed that the participants' lack of dyslexia awareness is due to a rote conceptual understanding of dyslexia. However, since the participants' current background knowledge on dyslexia conception is not fully established, the new knowledge on dyslexia conception [highlighting neurodiversity theory] was introduced. The findings show that the all three artefacts contain messages that trigger the participants' learning inquiry about dyslexia especially on identification. Messages that were framed using relevant situations, attributes, choices, actions, issues, responsibility and news with the help of audio and visual representations

triggered the participants' learning inquiry about dyslexia. The research concludes that utilising emotional and meaningful teacher-students' situation as framing of the messages appears to be the most significant message framing element.

Table of Contents

Table of Contents	iii
List of Tables.....	ix
List of Figures	xi
DECLARATION OF AUTHORSHIP	xii
Acknowledgements	xiii
Definitions and Abbreviations.....	xiv
Chapter 1: Introduction	1
1.1 Statement of the Problems.....	1
1.2 Theoretical and Conceptual Framework of the Study.....	6
1.2.1 Models of Message Frame and Framing	7
1.2.2 Model of Teacher Professional Development.....	8
1.2.3 Model of Communication	10
1.2.4 Model of Dyslexia	12
1.2.5 The Conceptual Framework.....	14
1.3 Affordances	17
1.4 Research Objectives and Research Questions.....	18
1.5 The Summary of the Chapter.....	20
Chapter 2: Literature Review	23
2.1 Gaps in the Literature	24
2.2 Teacher Professional Development.....	26
2.2.1 Teachers' Roles	27
2.2.2 Model of Teacher Professional Development.....	28
2.2.3 Outcomes of Teachers Professional Development	31
2.2.4 Advantages of Online Teachers' Professional Development.	32
2.3 Linear Communication and Online Professional Development	35
2.3.1 Online Instructional Design	39
2.3.2 Dual Coding Theory, Split Attention and Redundancy Effect.....	39
2.4 Dyslexia	41

2.4.1	Evolution of Dyslexia Theories and Inclusive Education	42
2.4.2	Empirical Studies of Dyslexia Awareness in Malaysia	46
2.4.3	Overview of Special Needs Education and Dyslexia in Malaysia	48
2.4.4	Dyslexia Awareness and Teachers Professional Development	50
2.4.5	Dyslexia and Literacy Intervention in Malaysia	52
2.5	Message Frame and Framing	55
2.5.1	Message Frame	57
2.5.2	Message Framing	59
2.5.3	Teachers as Adult Learners	61
2.6	Overview of the Literature	64
Chapter 3:	Research Methodology.....	67
3.1	Research Paradigm	67
3.2	Research Positionality	69
3.3	Inductive and Deductive Approach	70
3.4	Research Design	72
3.5	Pre-Message Framing	78
3.5.1	The Data Collection	78
3.5.2	The Data Analysis	80
3.6	Message Framing Phase	82
3.6.1	Data Collection	83
3.6.2	Data Analysis	86
3.7	The Instant Messaging Interview Mode	93
3.8	The Context of the Research	95
3.9	The Participants	96
3.10	Research Ethics	98
Chapter 4:	Finding Analysis: Dyslexia Awareness	101
4.1	Findings from the Observations of Facebook Group Discussions	101
4.1.1	The Teachers' View on Literacy and Numeracy Screening	102
4.1.2	The teachers' View on Intervention for LINUS Students	104
4.2	Findings from WhatsApp Instant Messaging In-depth Interview	106

4.2.1	The Teachers' Perception of Dyslexia's Problem and Educability.....	106
4.2.2	The Teachers' Perception of Literacy and Numeracy Skills Identification.....	108
4.2.3	The Teachers' Understanding of Dyslexia Learning Intervention	113
4.3	Interpretation	116
Chapter 5:	Finding Analysis: The Triggering Messages	119
5.1	The Triggering Messages	119
5.1.1	Dyslexia Explained: What's it like Being Dyslexic – Video#1 (V1)	119
5.1.2	Dyslexia: A Hidden Disability – Video#2 (V2).....	122
5.1.3	Taare Zameen Par – Video#3 (V3)	124
5.2	The Teachers' Learning Process as the Supporting Evidence of the Triggering Messages.....	125
5.2.1	The Exploration Event (Building Up Understanding and Knowledge)...126	
5.2.2	The Integration Event (Emerging Ideas and Decision Making).	128
5.2.3	Resolution Event (Intention to Act).	132
5.3	The teachers' perception of effective dyslexia awareness messages.	135
5.3.1	Strengths and Weaknesses of V1	135
5.3.2	Strengths and Weaknesses of V2	136
5.3.3	Strengths and Weaknesses of V3	137
5.4	Summary and Interpretation	137
5.4.1	The Triggering Event.....	139
5.4.2	The Exploration Event.....	142
5.4.3	The Integration Event	142
5.4.4	The Resolution Event	143
Chapter 6:	Findings Analysis: Message Framing	145
6.1	Analysis of the Artefacts' Content	145
6.1.1	V1 – Dyslexia Explained: What Is It Like Being A Dyslexic?	146
6.1.2	V2 – Dyslexia: A Hidden Disability	147
6.1.3	V3 – Taare Zameen Par	148

6.2	The Narrative Techniques Supporting the Themes.....	150
6.2.1	Analysis of Literary Devices	151
6.2.2	Analysis of Multimedia Representations	156
6.3	Summary of the Message Framing Analysis.....	168
Chapter 7:	Discussion	175
7.1	The Triggering Messages	175
7.1.1	The Effects of Being an Ignorant Teacher	176
7.1.2	The Successful Dyslexic Professionals	179
7.1.3	The Multisensory Teaching Approach.....	182
7.1.4	The Dyslexic's Unique Way of Thinking.....	183
7.2	Implications for the Participants of the Study.....	184
7.2.1	Learning about Dyslexia Identification.....	185
7.2.2	Learning about Dyslexia Intervention	187
7.3	Summary of the Discussion	188
Chapter 8:	Conclusion	191
8.1	The Summary.....	191
8.2	Findings of the Study	193
8.3	Limitations of the Study	196
8.4	Implications of the Study.....	197
8.4.1	Implications for Teacher Education	197
8.4.2	Implications for Malaysian Education Policy.....	198
8.5	Recommendations for Future Research.....	201
8.6	The Researcher's Reflections.....	201
Appendix A	: Interview Protocol.....	203
Appendix B	: Data Analysis Process	204
Appendix C	: Synopsis of the Artefacts Utilised in the Study	206
Appendix D	: Risk Assessment Form	208
Appendix E	: Consent Form	213
Appendix F	: Ethics Application Form	214

Appendix G	: Participation Information Sheet.....	220
Appendix H	: Participants’ Consent Procedure	223
Appendix I	: Interview Script Sample	224
Appendix J	: Participants’ Reflection on V1	225
Appendix K	: Participants’ Reflection on V2	230
Appendix L	: Participants’ Reflection on V3	244
Appendix M	: Data for Framing Analysis	254
Appendix N	: Report to the Professional and Development Unit, MoE.	255
Appendix O	: Abstracts for Published Articles	263
<i>ABSTRACT</i>	263
List of References	265

List of Tables

Table 1-1 Affordances of the Network Environment and the Attributes of “How People Learn.”	18
Table 3-1 Objectives and the Methodology of Each Phase of the Study.....	73
Table 3-2 Emerging Themes from the Regrouped Emerging Codes	82
Table 3-3 Typology of Seven Models of Framing Applicable for Public Relations (Hallahan 1999, p.210)	85
Table 3-4 Coding Manual for the Identification of Triggering Messages and the Participants' Learning	87
Table 3-5 Results from the Code Reliability Testing	88
Table 3-6 Results for the Key Themes Codes Reliability Test	91
Table 3-7 Results for the Coding Manuals for the Literary Devices Analysis Reliability Test	92
Table 3-8 Results for the Coding Manual for the Media Analysis Reliability Test	93
Table 3-9 Advantages of Conducting Interviews Via Instant Messaging Mode (Aida et al. 2019).	94
Table 3-10 Participants' Profile	97
Table 5-1 Framing Effects of the Messages on the Audience.....	138
Table 5-2 Triggering Messages.....	141
Table 6-1 Strengths of V1 Narrative Devices	170
Table 6-2 Strengths of V2 Narrative Devices	171
Table 6-3 Strengths of V3 Narrative Devices	173

List of Figures

Figure 1-1 TPD for Students' Growth vs. Teachers' Growth	9
Figure 1-2 Expanded Linear (action) Communication Model	12
Figure 1-3 Conceptual Framework.....	16
Figure 2-1 Lasswell Formula with Corresponding Elements of Communication Process (Source: McQuail and Windahl, 2015)	37
Figure 2-2 Braddock's Extension of Lasswell's Model. (Source: McQuail and Windahl, 2015)	37
Figure 2-3 Shannon-Weaver's 'Mathematical Model'. (Source: McQuail and Windahl, 2015) ..	38
Figure 2-4 Expanded Linear (action) Communication Model	38
Figure 2-5 Evolution of Theories of Dyslexia and Their Relation to Inclusive Education Policy (Aida and Woollard 2019)	45
Figure 2-6 The Pyramid of Support for School Students with Dyslexia (based on the model proposed by Rose 2009, p. 80)	51
Figure 2-7 Cognitive Awareness and Affective Awareness in Relation to Meta-Awareness.....	63
Figure 3-1 Research Design	76
Figure 3-2 Expansion of Codes for Second Research Question	89
Figure 5-1 Distribution of the Participants' Artefact Preferences	135
Figure 6-1 Framing of V1 Messages	169
Figure 6-2 Framing of V2 Messages	171
Figure 6-3 Framing of V3 Messages	172

DECLARATION OF AUTHORSHIP

I, Aida Binti A. Rahman declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Understanding Message Framing for Online Teachers' Professional Development: Educational Affordances of Dyslexia Awareness in Malaysia.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. Parts of this work have been published.

Signed: *Aida*

Date: May 2019

Acknowledgements

For the opportunity to write this thesis, I am thankful to many people.

First and foremost, I would like to thank Allah the Almighty for His blessings and my family, for their on-going love, concern, and encouragement, without which I could not have gone through with this project. Of those I'm especially thankful to husband, Farul Azhan; my darling children, Khairin Batrisyia, Fatin Nabilah and Abid Eilman; my father A.Rahman; and my siblings Amri, Afifi, and Hishamuddin who have always been there for me and extended endless material and emotional support. I love you all very much. To my mother-in-law and Makcik who are always there when I need a mother's love; in-laws, nieces, nephews and the whole family – Cheers! To my stepmom, Hafsah – thank you for taking care of papa when I am away. Most importantly, this thesis is a tribute to my late mom, Awa – I am who I am because she loved me.

To my dedicated team of research supervisors, Dr. John Woollard, Dr. Charis Voutsina and Mr. David Galbraith for their insightful comments, suggestions, patience and support. To all the participants in this research, for sharing with me their experiences, views and reflections. To my employer, the Universiti Teknologi Malaysia for sponsoring my study and supports throughout my study; especially to the late Dr. Adlina of Language Academy and Mrs. Siti Norhayati of HCD who tirelessly back me up throughout this journey; and to my colleagues for sharing my workloads when I am away for the study leave. I am deeply in-debt with all of you.

The peer support and critical debates among fellow students and researchers at the Southampton Education School. I could not have done it without you. In particular, I would like to thank Sadhbh O Dwyer, Fairuz'Ain, Rosmalily, Syazylyni, members of PEGASUS and CRI research groups and all my fellow Malaysian friends.

The list is endless and words could not do enough justice to express how thankful I am. Thank you from the bottom of my heart.

Definitions and Abbreviations

3M	Intervention Programme for Reading, Writing and Numeracy
KIA2M	Early Intervention Programme for Writing and Reading
LINUS 2.0	Literacy and Numeracy Screening (Second edition. Year 2013)
LINUS	Literacy and Numeracy Screening (First edition. Year 2010)
LS	Student enrolled for LINUS remedial programme
MoE	Ministry of Education
oTPD	Online Teacher Professional Development
RA	Research Assistant
TPD	Teacher Professional Development
V1	Artefact 1/ Video 1
V2	Artefact 2/ Video 2
V3	Artefact 3/ Video 3

Chapter 1: Introduction

This chapter introduces and shows the interrelationship between message framing, online teachers' professional development [oTPD], and Malaysian inclusive education system to support that development within the context of raising dyslexia awareness in Malaysia. It describes the theoretical and conceptual framework underpinning the study. In this introductory chapter, the statement of problems; the theoretical and conceptual framework of the study; the affordances; and the research objectives and research questions are presented. The theoretical and conceptual framework of the study shows the interconnection between the different disciplines of: the frame and framing of the message [from the communication discipline]; online teachers' training [from the professional development discipline]; and dyslexia awareness [from special need education and inclusive education discipline].

1.1 Statement of the Problems

The success of inclusive education largely depends on the willingness and the ability of teachers to make accommodations for individuals with special educational needs (Bender et al. 1995; Jordan et. al 2009). Eleweke and Rodda (2002) who examines the challenge of enhancing inclusive education for learners with special educational needs in developing countries found that the 'absence of support services, relevant materials, inadequate personnel training programmes, lack of funding structure and the absence of enabling legislation' (p. 113) are the major factors that hamper effective inclusive education implementation in these countries. To date, the shortage of properly trained teachers in special need remains a challenge for Malaysia to implement inclusive education (Youssoof 2008; Pei 2015; MoE 2018b). The biggest challenge is to prepare teachers with a change in the thinking patterns (Marimuthu and Cheong 2015); understanding the right concept of inclusive education (Jelas 2010); and most importantly, making sure that the government's aspiration is shared and endured by the teachers (Harland and Kinder 1997) throughout the teachers' professional development [TPD]. In general, studies on Malaysian teachers' feedback on the implementation of inclusive education show that teachers agree on the importance of inclusive education but are less confident in its application (Ali et al. 2006; Jelas 2010).

In the framework for action on special need education endorsed by the delegates in Salamanca conference (UNESCO 1994), it is mentioned that positive attitudes among teachers towards those with special educational needs should be promoted (principle number 68). Besides, principle number 72 emphasises that 'resources must also be allocated to support services for training of

mainstream teachers' (p.42). These positive attitudes could be encouraged if teachers' knowledge is sufficient enough (Morgan and Cannon 2003) to reach the teachers' consciousness and understanding about the problems. So it is crucial to prepare the teachers to have a clear vision of the curriculum direction so that the teachers could hold onto the changes as shared responsibilities. In order to move towards rich accountabilities, there are needs for what Schleicher (2007) referred as 'informed prescription' and support for 'informed professionalism' (p. 85).

The expected change in Malaysian education system is huge (Chong and Graham 2016) and remain to date challenging. There are many factors that impede the success of the implementation of inclusive education in Malaysia which include the teachers' excessive workloads (Azita 2012), large class sizes, extensive amount of subjects taught in primary school (MoE 2018a), and lack of the teachers' and society's awareness. It is hoped that an awareness campaign especially via teachers' professional development [TPD] would be able to convince the teachers and teaching professionals of the urgent need for inclusive education - so that the teachers could serve as the agents of change.

In planning towards the implementation of inclusive education, Malaysian government in its Malaysia Education Blueprint 2013-2035, targeted that by 2025, all teachers in Malaysia would have received some training to teach children with specific and special education need. Previously in Malaysia, children with special needs are enrolled in either integrated school [mainstream school with special needs class] or special needs school. As an effort to bring the children with special needs into the inclusive education system, Education Performance and Delivery Unit reported that 23.2% (16,899 out of 72,715) of students with special needs enrolled into mainstream schools in 2015. In Malaysia, albeit the effort to overcome problems with special needs education, the purpose is not focused on social justice but mainly for academic achievement (Lee 2008; Devaraj et al. 2009; Lee et al. 2009).

Undeniably, the development in special education in Malaysia is remarkable (Muhamad Nadhir and Alfa Nur Aini 2017) especially for children with physical disabilities: disabled-friendly facilities have been provided under the inclusive education holistic model project. In addition to children with disabilities, the support for children with specific needs and talents have also been highlighted in Malaysia Education Blueprint 2013-2035 that encourages the development of sports and art schools. Despite the Malaysian government's efforts to bring-in marginalised children into the mainstream system, children with dyslexia who are already in the mainstream system will continue to suffer from being unidentified, misdiagnosed, misunderstood and being left-out of the need for specific teaching and learning methodology that suits their brain function.

Marginalised children such as those with physical disabilities and children with different abilities and talents are easily identified so that necessary supports can be bestowed. Children with dyslexia, on the other hand, suffer from hidden disabilities and are often neglected and misunderstood (British Dyslexia Association). According to Reid (2012),

“Dyslexia can be described as a hidden disability because we may not know the person has dyslexia until they are put into a situation that requires skills in literacy or processing certain types of information” (p.6)

The hidden aspect of disability has often led to a misunderstanding of people with dyslexia. Often in school, students with dyslexia are labelled as lazy. Being labelled as lazy gives a massive impact on the children’s self-esteem and future life (British Dyslexia Association). Since dyslexia is hidden, teachers need to spare more time identifying and executing the intervention programme. Therefore, it is crucial for teachers to be aware of the problems with dyslexia so that necessary supports can be delivered - enabling the dyslexic children to learn in the inclusive education system. Previous literature demonstrates that Malaysian teachers’ awareness of dyslexia is considered low (Masitah et al. 2009). This is because the number of professionals with specialised training to deal with the identification of those with specific learning disabilities in Malaysia is limited (Peters 2010; Dzalani and Shamsuddin 2014). The lack of TPD for teachers in Malaysia on dyslexia and special need education (Abdul Rahman and Nazariyah 2013) leads to unawareness of dyslexia (Gomez 2004; Sylvia 2009; Peters 2010; Dzalani and Shamsuddin 2014; Pei 2015); and a difficulty to understand the concept of inclusive education (Jelas and Mohd Ali 2012) which will further increase the chances of dyslexia negligence.

The biggest challenge, however, does not only rely on training the teachers with skills to manage children with special needs but also to prepare teachers with a change in the thinking patterns (Marimuthu and Cheong 2015) so that the teachers’ conceptual understanding can be enhanced (Jelas 2010). The issue of dyslexia and inclusive education should be analysed as a dilemma (Norwich 2007) from the perspective of rights and social justice (Gewirtz, 2002). Unfortunately, despite the improvement made to its Zero Reject Policy, Malaysian educators preferred integration education to inclusive education (Selamat pagi Malaysia 2019). Educators’ failure to understand how inclusive education systems work for the learners with special needs, especially those with specific learning difficulties, mainly results from fear of the unknown nature of the disabling condition (Avramidis and Norwich 2002; Jordan et. a 2009).

The author of the report ‘Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties’ or known as Rose Report (2006) suggested that ‘the quality of an education system cannot exceed the quality of its teachers’ (p.15) as success in supporting students with

dyslexia depends on the teachers' understanding of what and why they need to support the children. According to Reid (2012), it has considerable implications for teachers training and dyslexia awareness campaign to ensure successful inclusion programme for children with dyslexia.

In order to lead the transformation, the teachers need to be supported through professional development. That professional learning enables the teachers to process new understanding and evaluate the implications for both, the teachers' teaching and the students' learning (Harris et al. 2017). According to Day (1999, in Day 2004), professional development for teachers must take into account its direct and indirect impacts upon:

“teachers' thinking, planning and actions by taking into account their life and career phases and the contexts in which they work” (p.292).

TPD has been a great investment and an effective tool for educational reforms regardless of the scopes - national or international; whole nation or single school – because the most important agents of reforms in education are teachers (Morris 2002; Villegas-Reimers 2003; Harland and Kinder 2006). Traditionally, teachers are given 'hit-and-run workshops' designed to transmit the knowledge on what the new expectations are and how to implement the new ideas (Elmore 2002). It is within the routine course of the teachers' work that the changing process occurs.

The implementation of changes in education policy usually is difficult as teachers begin with uncertainty and require some time to make sense of the new information before they could embark with the latest ideas and confront for more details (Elmore 2002) that may or may not end with success after several advances. Dillabough (1999) claimed that policymakers tend to ignore the teacher-as-a-human factors that interpret the policy into practice; the process that the teachers undergo to put theory into practice requires both cognitive and emotion involvement (Avalos 2011) – to be able to acknowledge as well as share the same aspiration of the policy. Failure to recognise the involvement of human factors could jeopardise the realisation of the policy vision (Hargreaves 1998). Pajares (1992) claimed that teachers' decisions and choices on their development opportunities and practices depend on their beliefs more than their knowledge. The beliefs act as filters for ideas to be considered, resulting in resistance to change. Although there is a large body of literature on instructional practices of TPD (Derry et al. 2005; Derry 2006), empirical evidence on the significance of belief-related issues in the design and planning of TPD is hardly available.

Advancements for policy change are typically derived from continuous researches that generally focus on pedagogical content and methodological development especially on approaches (Elmore 2002); intervention (Abzol and Haron 2017); technical infrastructure (Schlager and Fusco 2003); evaluation of the TPD on students' achievements (Petras et al. 2012). Focusing on materials and

resources alone in preparing teachers is not adequate for policy changes in education (Fullan 2007). According to McLaughlin and Mitra (2001), in order to achieve deep reform, teachers need more than the knowledge of know-what and know-how: the knowledge of know-why (that is less emphasised in many TPD) could facilitate teachers' conceptual understandings of the changes - and the absence of the conceptual understandings will lead to superficial implementation.

Whether it is traditional face-to-face TPD or oTPD, TPD is about the learning process. The heart of this transmission process is in its communication system, and the heart of communication is the messages. In a case where TPD is implemented to realise the national education agenda which enlists several visions and missions – the complexity of TPD tasks is expected to increase. Such TPD contains multiple communicative goals that add to variable human dimensions and emotional aspects to the tasks (Sheer and Chen 2004). With the right multimedia aids (Mayer and Moreno 2002); and the right choice of media and message characteristics (Sheer and Chen 2004), the chance of achieving complex communication goals is much higher.

Nowadays, TPD has taken a new form. From the era of Computer-Mediated Communication to Web 2.0 (O'Reilly 2005), net-generation learners now have access to learning resources more easily than it was years ago. This evolution has opened a vast opportunity for online education. Online education has gained more learners' participation over time. With the current lifestyle that involves frequent use of mobile and digital technologies, online education is easily accessed (Oblinger et al. 2005). This has made online education to become very popular. In Malaysia, 68.1% of the population communicate via the internet (Internet World Stats 2016). In addition to sources such as Google and Wikipedia, the latest innovative technology like Massive Open Online Courses (MOOC) eases the quest for knowledge. The demand for oTPD is also increasing as the method is cost-effective (Ahmed 2016) to overcome an acute shortage of resources and experts particularly in developing countries (Fyle 2013). In addition, online courses enable unlimited enrolment (Cuzack 2014) and access to educational opportunities.

Teachers will not make any changes unless their perspectives change (Greene et al. 2008). Hence it is vital to generate teachers' self-sustained learning process so that the teachers' knowledge continues to develop. According to Hargreaves and Fullan (1992), when teachers' existing awareness which includes knowledge, beliefs, and practice are addressed, meaningful change can be achieved. Thus, it is vital to ensure that the teachers engage in their thinking and professional knowledge.

One of the critical elements that encourage learning engagement is the messages that trigger the learners' thinking. The challenging task, therefore, is to frame strong messages that could trigger the teachers to explore the new knowledge. Message framing has been more widely studied in

the medical (Rothman and Salovey 1997) and advertising fields (Hirsh et al. 2012) as the amount of persuasion is related to the framing of the message elicited (Smith and Petty 1996).

Unfortunately, the empirical evidence on the study of message framing related to TPD is scarcely available and almost exclusively in the area of special need education and dyslexia. The study of message framing is important to ensure that the objectives of TPD are achieved. This is because, reframing the narration of the challenges in the current system (Ganegoda and Folger 2015; Drakulich and Kirk 2016) and portray the target audience's role (Avramidis and Norwich 2002) may change the target audience's receptivity of inclusive educational practice and, in turn, a higher level of social justice. Social scientists claim that public opinion on issues regarding policy transformation is susceptible to dramatic modifications (Drakulich and Kirk 2016). Thus, the right framing of the important messages will stir the audience's feeling and initiate learning interest.

With the emergence of multimedia technology, messages are presented in multiple types of modalities such as images, animations, video, voice, music (Kress and Van Leeuwen 1996), gesture and architecture (O'Halloran 2011). As a result, the meanings of messages are depicted and perceived differently. The teachers' online learning commitment is voluntary and the teachers' decision to commit with the oTPD depends on their first impression about the learning. A study on framing dyslexia awareness triggering messages may probably be the first step to ensure the resources utilised for dyslexia online teacher professional development (oTPD) facilitate the desired outcomes.

With the issues and challenges mentioned above, the researcher seeks to understand how messages can be framed to trigger teachers' interest to learn more about dyslexia identification and intervention. It is hoped that the findings of this study will be useful to inform TPD providers of the good principle of communication in an oTPD on dyslexia to teachers with a non-special need education background.

1.2 Theoretical and Conceptual Framework of the Study

This section introduces the reader to the core underpinning models that support the study of understanding the framing of online triggering messages about dyslexia. The models adopted in the study of message framing were sought from the theories of communication, professional development, and dyslexia. It is noteworthy to inform the readers that communication, professional development, and dyslexia are vast disciplines on their own. Therefore, in order to avoid unnecessary discussion of remote theories and models from the perspective of communication, professional development and dyslexia disciplines, the researcher would like the readers to narrow their focus on particular models - linear model [communication],

transformative model [professional development] and neurodiversity model [dyslexia]. Thus, the theoretical and conceptual framework of the study is introduced earlier in the introduction chapter, unlike other typical Ph.D. thesis structure.

In the following sub-sections, the selection of transformative model [professional development], linear model [communication] and neurodiversity model [dyslexia] were justified. Review of literature related to professional development is available at 2.2; communication at 2.3; and dyslexia at 2.4.

1.2.1 Models of Message Frame and Framing

A frame is defined as the content features of a message while framing is defined as the contextual features of a message (Vliegthart and Van Zoonen 2011). Though message 'frame' and 'framing' are different, Baden (2010) argued that 'people usually capable of forming many different frames to contextualize the same information, and therefore able to support their prior ideas and goals' (p.15), hence the study of message frame and framing are interrelated.

Scheufele (1999) explained the process of framing in two ways: frame building and framing effects. Frame is built based on agenda-setting which could be influenced by the journalist itself [internal] or influenced by interest groups [external] to deliver information to the audience; whereas the framing effect is the process of the outcome of the built frame which varies at individual-level of behaviour, attitude and cognitive (Scheufele 1999). It is important to highlight that this study was carried out to understand how the framing of the messages triggered the receivers' learning inquiry about dyslexia – not to assess the changes of receivers' belief as to the effect of the message framing. Hence, the analysis of the message framing was carried out to understand the teachers' (as receivers) perspective instead of the presenter's perspective. The analysis was done according to Garrison, Anderson and Archer's Practical Inquiry Model (2001); while the framing of messages is based on Hallahan's seven models of framing applicable to public relations (1999). The reason for choosing the framing models for public relations is because the awareness campaign (like the dyslexia awareness campaign) is targeted to a public or non-professional audience.

According to Hallahan (1999), story framing also includes narrative techniques. Since the three selected artefacts in the study were in the form of video, the analysis of the narrative techniques of the selected artefacts' included multimedia devices. Given the growth of digital information, message framing research has begun to relate the framing process with multimodal devices because media are 'the most important actors in the framing process' (Baresch et al. 2010, p.638). The framing analysis of the study contains the followings:

- i. Key themes/ ideas that focus on the message.
- ii. Narrative techniques that support the themes.
 - Literary devices.
 - Multimedia devices.

1.2.2 Model of Teacher Professional Development

The TPD models underpinning this study are TPD models that focus on transformation as TPD purposes and outcomes (Kennedy 2005; Fraser et al. 2007). Kennedy (2005) analysed nine key-models of TPD and grouped them according to i) the purposes and ii) the outcomes. Kennedy's model was later enhanced by Fraser et al. (2007) who illustrated the complexities of TPD policies, practice, and impacts of teacher professional development. This study finds the model suggested by Fraser et al. (2007) to be relevant at attending to the purpose of this study.

According to Fraser et al. (2007), teachers learn from personal, social and occupational experiences (Bell and Gilbert 1996) and learning can be either formally planned or incidental and informal (McKinney et al. 2005). These learning opportunities can be located along the continuum of 'transmissive', 'transitional', and 'transformative' models (Kennedy 2005). The transmissive model focuses on technical aspects of the job whereas the transformative model focuses on issues related to values, beliefs, and attitudes. The transitional model, on the other hand, can support either the agenda of a transmissive model or transformative model. In addition to the general division of TPD agenda endorsed by Kennedy (2005), Fraser et al. (2007) highlighted that TPD focuses on the growth of teachers and students.

Fraser et al. (2007) highlighted a meaningful argument here. The researcher would argue that all these 'transmissive', 'transitional', and 'transformative' models of TPD aim at enhancing students' growth even though it focuses on teacher's values, beliefs, and attitudes. A TPD may be implemented to teach teachers (transmit content knowledge) on how to teach students; as well as to teach teachers about students so that teachers' motivation is heightened (transform teachers' awareness) to help students to develop. In this transformative context (TPD for student's growth), TPD is set to be a platform for teachers' recuperation. In contrast, if TPD is implemented with the aim of teachers' growth, the teachers learning may be extended beyond the traditional transfer of knowledge, skills and attitude purposes. TPD that aims for teachers' growth focus on teachers' learning process of understanding of teacher professionalism in which they negotiate and renegotiate the meaning of professionalism (Fraser et al. 2007). In that sense, the researcher proposes that the transformative oTPD could be set to be a platform for teachers to nurture and foster their learning interest so that they can embark further on self-inquiry

knowledge. The notion of TPD for students' growth vs. teachers' growth that the researcher draws from Fraser et al. (2007), from which the researcher developed the idea of TPD for teachers' professionalism in the current study is illustrated in Figure 1-1.

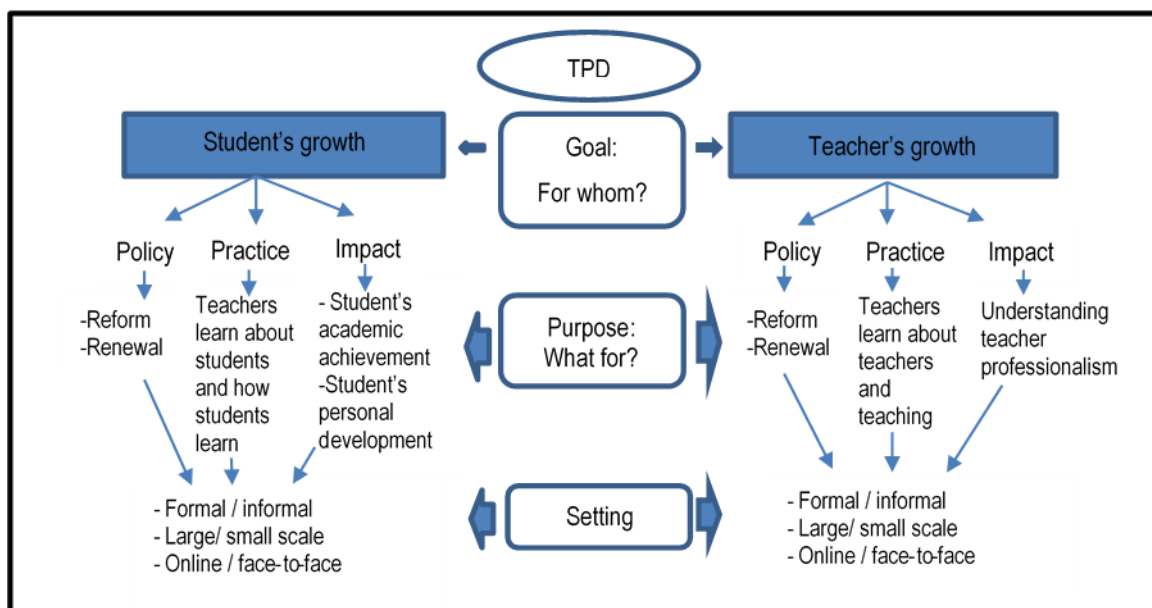


Figure 1-1 TPD for Students' Growth vs. Teachers' Growth

The explanation of the graphic illustration on the different implementation of TPD for students' growth vs. teachers' growth is as follows:

- i. The Goal: The TPD can serve two different purposes: students' growth and teachers' growth.
- ii. The Policy: TPDs are normally implemented to accommodate new policy – either the policy is a renewal policy; or the reform policy. In other words, all kind of policies may affect the growth of the students, or the teachers, or both. Hence, prior to the execution of the TPD, TPD providers or teacher educators need to identify whether the purpose is for the growth of the students, or the teachers, or both. Ability to determine the purpose will help TPD providers or teacher educators to frame suitable messages for the targeted outcomes.
- iii. The Practice: In the TPD that aims at student's growth, the practice will evolve around teachers learning about students and about how the students learn. The TPD content would be of pedagogy knowledge, content knowledge, technological pedagogical knowledge, pedagogical knowledge, and pedagogical belief. In contrast, for TPD that aims at teachers' growth, the practice is about teachers and teaching. Teachers learn about their teaching responsibilities, teaching as a profession, and values of teaching.

- iv. **The Impact:** The impact of TPD for student's growth has always resulted in evaluating students' academic achievement. As Sahlberg (2007) asserted, TPD on policy reform has always led to consequential accountability on teachers to impose new concepts to students (the reason why TPD for student's growth is implemented) and inclined towards high stake census tests to evaluate the success of the TPD and to make sure that teachers are able to implement the changes in the policy. The impact of TPD for teachers' growth is evaluated from the teachers' understanding of teaching professionalism. The literature review barely demonstrates empirical evidence of the evaluation of teachers' professionalism. This may imply that a teacher's understanding of teaching professionalism is hardly evaluated, or neglected. Perhaps, it is because of the outcomes of such TPD is challenging to evaluate and requires a certain period to be established (Elmore 2002).
- v. **The Setting:** All types of TPD - either for growth of the students, or the teachers, or both; that address any types of policy; with different set of practice; and whether it needs to be evaluated or not – can be carried out in formal or informal; large or small scale; and online or face-to-face settings.

With regards to Kennedy's (2005) notion of transformative, transitional and transmissive TPD, the researcher argues that whether it is transformative, transitional or transmissive, the TPD providers would have to associate it with the practice. For example, if the purpose is to transform teachers' belief about adopting a certain pedagogical method of teaching, the best way to go about is to teach teachers about the students and how the students' learn (TPD for students' growth). However, if the aim is to transform teachers' belief about the teachers' responsibility to help students for the sake of social justice, the best way to go about is to teach teachers about teachers' professionalism (TPD for teachers' growth). Central to this oTPD is to understand how messages are communicated via oTPD could influence and form teachers in the alteration of the learning experience (Kellsey and Taylor 2016).

1.2.3 Model of Communication

There are three models of communication: a) Linear (action) Model; b) Interaction Model; and c) Transaction Model. Since this study looks at how messages could be framed as the introductory for learning resources (online) that are perceived by the receivers without the presence of a facilitator, a linear model of communication is considered the most suitable model to be referred.

The linear model is a one-way communication model in which the meaning of the message is fixed by the sender to initiate (action) receivers' feedback (action). In this model, the sender is

responsible for problems (McGaan 2016). It is essential to understand that people will only clarify when they are confused. People rarely notice their misunderstanding until further interactions occur. The action model is the fundamental model of communication in the oTPD facet. Applying action model in framing messages could reduce the risk of communication fault as an effect of the missing-facilitator-presence during oTPD. Even though there is an opportunity for interaction in online education, the chances are limited as compared to face-to-face education (Abbott 2017). Hence, it is essential that oTPD providers reduce communication error when considering message framing while designing an online module. The linear model is also known as the action model. According to Lasswell (1948), there are five aspects in an act of communication: the communicator; the message; the channel used; the receiver; and the effect of the communication. Lasswell's model was criticised as an outdated model that is no longer relevant to accommodate the technological change. A review of the critics by Sapienza et al. (2015) outlined the technical misfits of Lasswell's model in today's communication as static and missing of feedback component. Nonetheless, this study focus at the very initial stage of an online communication – the triggering event. It is vital to acknowledge that the triggering aspect of the communication is a linear form of communication. Tuchman (1980), in response towards Lasswell's famous construct 'Who, said what, in which channel, to whom, with what effect?' (p.601), replied 'Who cares who said what to whom ...?' (Sapienza et al. 2015, p. 604). In this study, 'what was said and how it affects the receiver', does matter. Thus, the Lasswell's model of linear communication is relevant to be adopted in the study.

Lasswell's formula, although simple, according to McQuail and Windahl (2015), sets a typical trait of early communication model, and is considered as a relevant and useful communication model today (Sapienza et al. 2015). It visualises the intention of the sender to influence the receiver in communication. Braddock (1958) found two more aspects in the communication process that distinguish message framed by one sender to another sender or the same sender in different events: a) under what circumstances; and b) for what purpose do the communicator deliver the message. Braddock's formula allows communication scholars to explore communication as a cultural context that is diverse (Biswas et al. 2017). In addition to the communication models introduced by Lasswell and Braddock, Shannon and Weaver (1949) in McQuail and Windahl (2015) suggested that source of interference to be a dysfunctional factor of communication. In the researcher's point of view, the combination of Lasswell, Braddock and Shannon and Weaver's models expand the whole linear communication process. The expansion of the linear (action) model is illustrated in Figure 1-2.

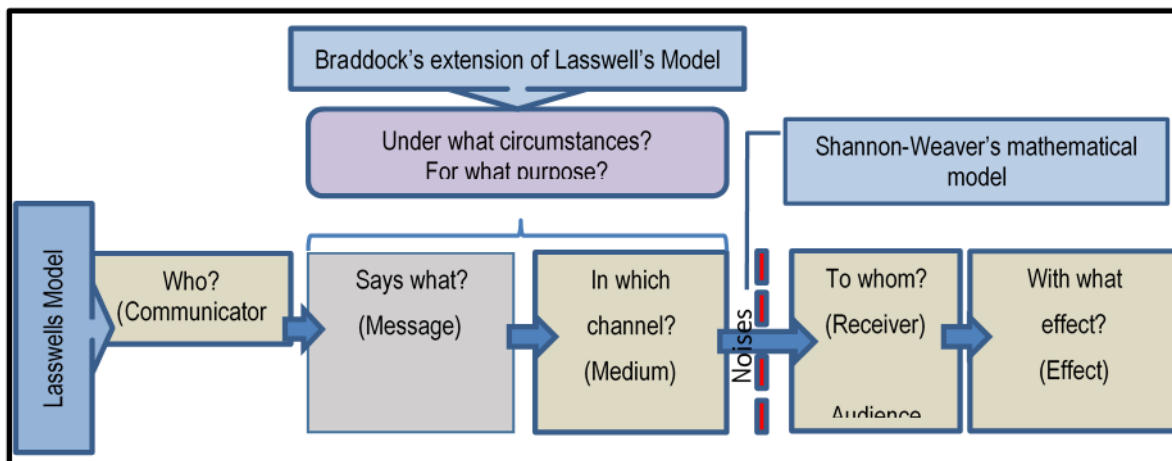


Figure 1-2 Expanded Linear (action) Communication Model

If TPD developers take into consideration of the circumstances and the purpose of the training [Braddock] as well as the possibility of interference [Shannon and Weaver] during the process of designing the oTPD, the chances for success will be higher.

The linear model fits into the purpose of the study in the following way.

- i. The communicator - The TPD developers.
- ii. The message - Dyslexia awareness.
- iii. The channel used - Online TPD.
- iv. The receiver – The teachers [the participants].
- v. The effect of the communication - The framing effects towards the teachers' intention to learn more about dyslexia and to provide dyslexia supports.

1.2.4 Model of Dyslexia

The content of the proposed oTPD is to enable non-specialist teachers to be aware of the nature of dyslexia, and to understand the concept of specific learning difficulties; so that teachers are capable to play their roles for dyslexia supports. The intention to study the teachers' reactions to the messages coincided with the equal education policy reform introduced by the government of Malaysia (PADU 2017). Thus, the selected model of dyslexia addresses the social justice movement rather than academic per se. In order to understand the underpinning theory behind the model selected for this study, it is worth to acknowledge other available models dedicated to dyslexia.

In the initial stage of the study, there are two models of dyslexia available: Deficit models and Social models. The pedagogical models of dyslexia relatively adopt deficit model but support the

view of the social model. Deficit models of dyslexia are commonly used in the medical perspective that categorises dyslexia condition as 'disability' and 'mental illness' (Graby 2015). In contrast, the social models of dyslexia oppose the idea of 'deficit' that oppress people with dyslexia and replace the disability stigma with 'difficulty' (Cooper 2014). Despite the adoption of a social model of dyslexia in the pedagogical model, the intervention for dyslexia in Malaysia is still overshadowed by the concept of impairment and the intervention programmes return to the deficit models because the deficit models have root in for many years (Dzalani and Shamsuddin 2014; Graby 2015). Either way, structural or cognitive deficits, the deficit-based models result in 'disability-plagues culture' that are accustomed to the idea that dyslexia is a form of disability, impairment or disorders that are neurologically based (Armstrong 2010). Frith's model of dyslexia is a causal model that incorporates biological, cognitive, and behavioural descriptions. Frith's causal model is the most helpful at present (Riddick 2001) and has been widely adopted. In addressing dyslexia for inclusive education, Riddick (2001) recommended that the social model of disability to be considered so that negative attitude of the society towards dyslexia can be avoided (Oliver and Barnes 1998). However, more recently, a movement called neurodiversity has roots in, and it provides a new perspective of disability and survival (Graby 2015). Rather than labelling dyslexia as a form of disability nor difficulty, the neuroscience-education- based model or neurodiversity model celebrate specific learning difficulties including dyslexia as learning differences.

A clinical research on dyslexia via fMRI (functional magnetic resonance imaging) by Rimrodt et al. (2009) has finally revealed that children with dyslexia do not comprehend sentences in the same manner as children without dyslexia. It was found that different parts of the dyslexic' brains were activated as well during reading comprehension task by (Rimrodt et al. 2009). The findings bring in a new synergy between education and cognitive neuroscience (Gabrieli 2009). In recent years, dyslexia is more recognised as a difference rather than a deficit in cognition and learning. The findings reveal the deficit in normal reading part of the brain as the weakness but the activation in other reading parts of the brain as the strength of dyslexia. Thus, the neurodiversity movement not only recognises dyslexia as learning differences but also promotes the strengths of dyslexia (Armstrong 2015). With the rise of the movement, several neurodiversity projects have started to call the newly emerging social model of dyslexia as Neurodiversity model (Griffin and Pollak 2009; Cooper 2014). In 2017, the researcher discovered that the practice and the training for specific learning difficulties [new term for dyslexia] featured in Department for Education in UK documents, British Dyslexia Associations and International Dyslexia Association websites are aligned with the neurodiversity framework.

Due to the negative impacts of both disability and difficulty stigma on people with dyslexia among Malaysians, this study adopts a 'neurodiversity models of dyslexia' that proclaims the advantages

that dyslexics may possess. Neurodiversity models of dyslexia hold onto the neurological perspective that highlights the differences as well as the educational perspective that leads to the justice for getting the right intervention from learning to assessing. The remediation of dyslexia in this study is viewed as an intervention that stabilises and alters the brain activation (Gabrieli 2009) to support learning, but not to cure dyslexia.

1.2.5 The Conceptual Framework

The conceptual framework of this study is shaped within the framing of messages operationalised as a cognitive and affective presence in online communication. In order to understand how messages are framed to trigger a learner to continue learning in an online platform, the researcher needs to identify which messages trigger the participants of the study. The triggering messages were identified via the participants' reflections on certain messages [for examples scenes, characters, and information]. In order to confirm that the triggering messages do trigger the participants' learning inquiry, this study utilised the learning process guideline from Garrison, Anderson and Archer's model of practical inquiry. It is crucial to claim that the model of practical inquiry is not adopted totally. The researcher is only interested in using the model's four learning phases to ensure that the learning inquiry has taken place in an online learning platform. Even though online learning affords synchronous communication, the messages in learning resource are always the first time presented as asynchronous communication – it transfers (cognitive and affective presence) to the receivers. If the learners are triggered to explore the new ideas, chances that the receivers react to learn more about dyslexia will increase. According to Garrison (2003),

“The asynchronous and virtual nature of online learning calls on learners to be self-directed and to take responsibility for their learning. Hence, the educators or the providers are responsible to provide structure and guidance that will encourage and support students assuming increased control of their learning. The opportunity is that asynchronous online learning advantages and promotes self-directed and regulated learning” (p.5).

The model of practical inquiry of online learning highlights four phases of events (process) that lead to self-directed and self-regulated learning as follow:

- i. Triggering event [establishing the awareness and shared aspiration]
- ii. Exploration event [building up understanding and knowledge]
- iii. Integration event [emerging ideas and decision making]
- iv. Resolution event [intention to act]

Picard et al. (2004) claimed that rational behaviour, memory retrieval, decision making, and creativity are guided by an affective presence that intertwines with cognitive presence in online learning. Affective presence forms a relationship with learners which later made the learning affective. Compared to the cognitive presence in online learning that leads learners to 'knowing how' and 'knowing that', the affective presence leads the learners to 'getting to know you' (Picard et al. 2004 p. 263) where learning intention becomes more personalised. In designing an oTPD that aims at raising dyslexia awareness, the ability to provide structure and guidance that encourage and support teachers' control of their learning is crucial. This is because the process of raising awareness is mentally and emotionally demanding. It also requires some time to establish through which teachers continuously build up their understanding of dyslexia.

The messages framed in this study informed prescription and informed professionalism which entail policy learning rather than policy borrowing (Lingard 2010) where oTPD is implemented to nurture teachers' understanding of the underlying issues of dyslexia. The terms policy-learning and policy-borrowing refer to the method of policy implementation. When policymakers receive a new idea from other policymakers, they will explore what- the policy is about, how- the policy is implemented, why – the policy is introduced and when – the policy can be introduced before implementing it. The term policy-borrowing reflects the act of policymakers who only identify what- the policy is about, and how- the policy is implemented without understanding why – the policy is introduced and when – the policy can be introduced before implementing it (Lingard 2010). The differences between policy-learning and policy-borrowing have given significant implications to the types of TPD, and the messages that teacher educators or TPD providers need to consider when designing an oTPD for dyslexia awareness.

The goal of the oTPD in this study is to understand how messages are framed to trigger the teachers' learning about dyslexia. Nonetheless, since the data from the participants' reflections revealed that the learning process [exploration, integration, and resolution] occurred, the researcher decided to analyse further the framing that initiated such occasions. Evidence that indicates the teachers' ability to find the resolution [identifying their roles in supporting dyslexia, and giving ideas to support dyslexia or showcase their willingness to take part in future training on dyslexia], suggested that the framing of such triggering messages is considered effective. As mentioned earlier, in order for the teachers to make changes, their basic perspective on the issues that matter should change first. Changes is the main agenda of a transformative professional development; and there is an opportunity for a change to happen when the teachers [as change agents] were triggered to explore and integrate their old knowledge with new knowledge.

The conceptual framework, illustrated in Figure 1-3, indicates that framing of the triggering message takes account of the content and the narration of the messages via literary and media devices. Those literary and media devices trigger the audience's emotion and thinking. They lead the audience to explore the issues raised, integrate the new knowledge with the existing knowledge, and find the resolution to the challenges identified. A 'trigger', according to the Merriam-Webster meaning, causes an intense feeling and usually negative emotional reaction. Triggering messages are those that are seen to affect the audience's emotion and lead to targeted reactions. In this particular study, the audience's learning inquiry is the targeted reaction. The term 'message framing' in this study refers to the process. The 'message frame' refers to the short sequence (unit) within which a message is constructed. A single unit may be combined with another unit of frame to form a larger frame. For example, a large frame that illustrates the awareness message may consist of a frame of dyslexia definition, a frame of behavioural criteria of dyslexia, a frame of cognitive criteria of dyslexia and a frame of dyslexia conception. The term 'artefact' refers to the source of information. In this study, the artefacts were particularly selected from one type of resources namely videos. Since the artefacts selected are in the form of videos, the messages in this study were narrated via literary and media devices employed. Hallahan's (1999) typology of seven models of framing applicable for public relations was utilised to analyse the study's literary devices. The media devices include any visual and audio devices.

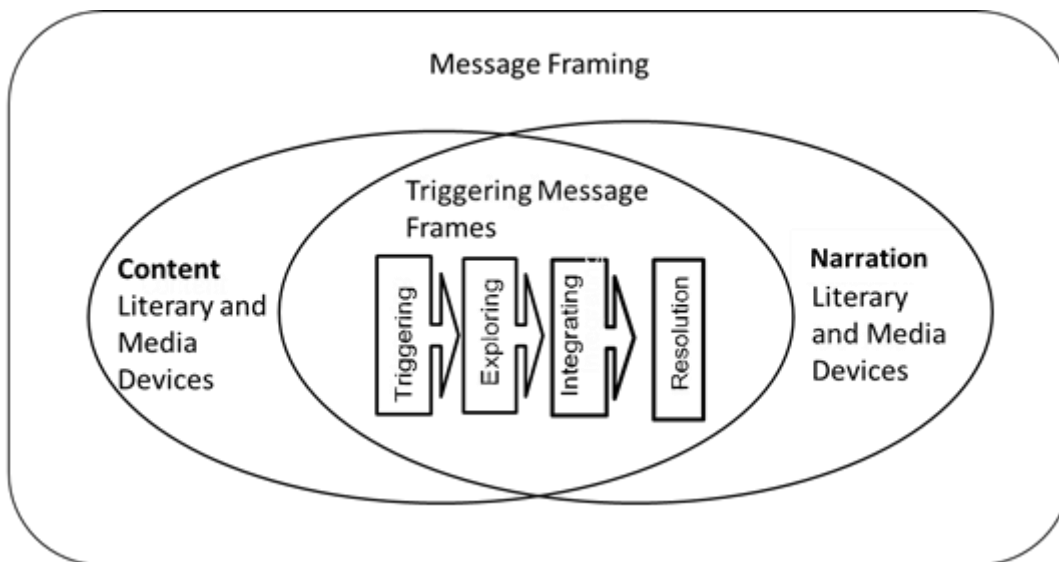


Figure 1-3 Conceptual Framework

The explanation of the above conceptual framework is as follows:

- i. The square: represents the elements of message framing. It indicates the primary purpose of the study that is to seek an understanding of how messages on dyslexia awareness can be framed via online affordances.

- ii. The ovals: represents the frames of the messages presented in the studied artefacts. The strength of the messages on Dyslexia awareness are framed with particular content and narrative criteria to enable the audience to be triggered. The first oval represents the content frames. The second oval represents the narration frames. As indicated in each oval, both the content and the narration of the artefacts utilised literary and media devices in their message framing.
- iii. The intersection area of both content and narration [labelled as the 'Triggering Message Frames']: This is the focus of the study. It represents the frames that form the triggering messages. Triggering messages should be able to lead the audience to four targeted reactions – to explore the new knowledge; integrate with old knowledge, and reach the resolution stage where decisions are made. The targeted reactions are known as the learning inquiry. They validate the framing identified as the triggering message.
- iv. The rectangles in an arrow: represent the process of learner self-inquiry from the initial encounter with the messages to find the resolution of the issues highlighted in the messages.

1.3 Affordances

The affordance is a term coined by a psychologist, Gibson to indicate the internal relationship between the ecology to visual perception – a view which is relevant to be adopted in educational technology discipline that questions designers to consider targeted learner's perception (Laurillard et al. 2000). In a multimedia perspective, affordances are viewed as an opportunity provided by technology to maximise learning potential and retention for knowledge production (Parchoma 2014). Despite being rigorously critiqued of its application in the study of technology and education (Oliver 2005), the concept affordance has continued to be used across discipline that emphasises on the relationship between human perceptions and its environment. Hence, the term affordances have been widely used (Parchoma 2014).

The affordances included in this study are opportunities provided by the Net for teacher professional development. The term 'online' is selected to indicate open options to these affordances. With the emerging technologies, the teacher educators or TPD providers have vast online learning options to conduct oTPD via Web 1.0 or Web 2.0. The online learning platform nowadays supports learning preferences (Anderson 2004). With the aids from multimedia learning resources, online learning can reduce learners' cognitive loads (Mayer and Sims 1994; Mayer and Moreno 2002; Mayer 2003) as well as increases affective aspects of learners (Picard et al. 2004). Among the affordances provided by multimedia learning resources are the graphics, the animations, and the background music, on top of the texts. Whether it is Web 1.0 or Web 2.0, the

messages could be framed in the same manner. Table 1-1 illustrates how the affordances of emerging technologies can be directed.

Table 1-1 Affordances of the Network Environment and the Attributes of “How People Learn.”

“How people learn” framework (Bransford et al.)	Affordances of the current Web	Affordances of the Semantic Web
Learner centred	Capacity to support individualized and community centred learning activities	Content that changes in response to individualized and group learner models
Knowledge centred	Direct access to vast libraries of content and learning activities organized from a variety of discipline perspectives	Agents for selecting, personalizing, and reusing content
Community centred	Asynchronous and synchronous; collaborative and individual interactions in many formats	Agents for translating, reformatting, time shifting, monitoring, and summarizing community interactions
Assessment centred	Multiple time- and place shifted opportunities for formative and summative assessment by self, peers, and teachers	Agents for assessing, critiquing, and providing ‘just in time feedback.’

(Source: Anderson T (2004) Towards a Theory of Online Learning, P. 54)

1.4 Research Objectives and Research Questions

Overall, this study seeks to understand how dyslexia awareness messages framed via online professional development could trigger Malaysian primary school teachers to learn about dyslexia as an effort to provide equal learning opportunity to all students and support their learning needs. Students with dyslexia are difficult to be identified, hence are at risk of being neglected for an equal learning opportunity. In Malaysia, albeit the effort to overcome problems with literacy, the purpose is scarcely social justice but mainly for academic achievement. It is crucial that teachers and everyone involved with education to realise that dyslexia is an issue of justice that underpins the movement of equal learning opportunity – a movement that forms inclusive education system. Hence, this study seeks to understand the best way to frame messages about dyslexia so that educationist especially teachers realise that the identification and the intervention for dyslexia is a social responsibility; and the national academic achievement will simultaneously increase when the needs for students with dyslexia are catered. This understanding will help teacher educators or TPD providers to design an online TPD (oTPD) on dyslexia awareness.

To realise this purpose, the researcher divided the study into two parts: The message framing [understanding message framing as a solution] and the pre-message framing [identifying the

problem – that is the participants’ knowledge gap]. In order to understand how the framing of the messages for dyslexia awareness trigger the participants to learn about dyslexia, the researcher sought for the participants’ learning experience and related them with the framing analysis [the content and the narrative techniques]. The participants learning experiences were analysed deductively using the learning inquiry framework (Garrison et al., 2001); while the framing of the messages was analysed using seven models of framing for public relations (Hallahan, 1999). Nonetheless, prior to the study of the framing, the researcher needs to select the artefacts for the participants to view. Hence, prior to the study of the message framing, a preliminary study on the participants’ current knowledge about dyslexia was conducted to inform the researcher of the criteria of the artefacts’ selections.

Thus, the study was conducted in two phases, addressing each research objective as follow:

1. Pre-message framing: Identifying the participants’ knowledge gap.
 - i. To identify Malaysian primary school teachers’ awareness level. Findings of the study suggest the participants’ zone of proximal development on knowledge about dyslexia and provide the information for the content of message framing in phase 2.
2. The message framing phase has two objectives:

Part 1: Identifying the triggering messages and the framing effects.

- i. To identify the triggering messages by understanding the participants’ learning events: triggering, exploring, integrating and resolution. The participants’ triggering events are identified by messages recalled, recognised and reflected by the participants during the interviews after the artefacts viewing activity.
- ii. To understand the implications of the triggering message/ messages on the teachers’ learning about dyslexia supports [identification and intervention].

Part 2: Understanding the frames and the framing of the triggering messages.

- i. To analyse construction of the frames and the framing (content and narrative) of the triggering messages identified in the studied artefacts.

These objectives lead to three main research questions as follows:

- i. What is the level of dyslexia awareness among Malaysian primary school teachers?
 - a. What does the awareness level suggest about the messages to be forwarded in the study?
- ii. Which message/messages triggered the teachers’ awareness and learning about dyslexia?
 - a. What are the framing effects of the triggering message/ messages on the teachers’ learning about dyslexia supports [identification and intervention]?

- iii. How are the messages framed to trigger the participants' awareness and learning about dyslexia?

1.5 The Summary of the Chapter

To recap, this study seeks to understand the best way to frame messages about dyslexia so that educationalists, especially teachers, realise that the identification and the intervention for dyslexia is a social responsibility. Moreover, when the needs for students with dyslexia are catered, their academic achievement will simultaneously increase. The understanding of the message framing will help teacher educators or TPD providers in the design of online TPD (oTPD) on dyslexia awareness.

Nonetheless, it is worth to acknowledge that the study has its limitation in term of the type of the artefact studied, as well as its content. There are three frame-types: awareness, identification and intervention. The artefacts studied are limited to videos that are available online. Hence, the elements of the triggering messages portrayed in other types of artefact have not been interpreted. Furthermore, the videos selected were ready-made videos for which the distribution of weightage of frame-types to be studied is beyond the researcher's control. The researcher could only ensure that the videos contain the awareness frame, identification frame, and intervention frame. These three frame-types address the two main neurodiversity principles – the nature of dyslexic brain and the highlights of successful dyslexics.

To realise this purpose, the researcher divided the study into two parts: The message framing [understanding message framing as a solution] and the pre-message framing [identifying the problem – the participants' knowledge gap]. In order to understand how the framing of the messages for dyslexia awareness trigger the participants to learn about dyslexia, the researcher sought for the participants' learning experience and related them with the framing analysis [the content and the narration] via literary and media devices. The participants learning experiences were analysed deductively using the learning inquiry framework (Garrison et al., 2001); while the framing of the messages was analysed using seven models of framing for public relations (Hallahan, 1999). Nonetheless, prior to the study of the framing, the researcher needs to select the artefacts for the participants to view. Hence, prior to the study of the message framing, a preliminary study on the participants' current knowledge about dyslexia was conducted to inform the researcher of the criteria of the artefacts' selections.

This introductory chapter [chapter 1] presents the overview of the problem, the purpose, and the underpinning theoretical and conceptual framework of the study. In the next chapter [chapter 2], a review of previous literature is presented to address the four key areas of the study: the

message framing, teacher professional development (TPD), communication and dyslexia. Chapter 3 elaborates the research methodology of the study. The findings are divided into three chapters. Chapter 4 depicts the findings and interpretation for the first research question; chapter 5 describes the findings and interpretation for the second research question; and chapter 6 describes the findings and interpretation for the third research question. The interpretation of the findings on the framing of dyslexia awareness messages that addresses the all three research questions in this study is discussed in chapter 6. Chapter 8 provides a platform for the summary of the study, the significance findings, the limitations, the implications to the education policy, practice and knowledge in Malaysia, and recommendation for future research in the field of neurodiversity and dyslexia awareness.

Chapter 2: Literature Review

In this chapter, a review of the literature on message framing, teacher professional development (TPD), online communication, and dyslexia are presented. There are four, different but significant, areas of queries in this study: message framing, online communication, professional development, and dyslexia. Dyslexia, albeit a context of the study, is an important context as the research is tailored for TPD on dyslexia awareness. The main focus is message framing and the implications for triggering messages regarding dyslexia in online teacher professional development [oTPD] for mainstream school teachers in Malaysia.

Ever since the Malaysian government announced to adopt inclusive education policy in 2013, the reform has been phenomenal. A lot has been done to bring in marginalised students into the mainstream system (Muhamad Nadhir and Alfa Nur Aini 2017). Nonetheless, Pei (2015) argued how inclusive education system could be successfully implemented in Malaysia when the education system is still firmly holding to a deficit model of disability. Since the emphasis is given to facilitate and to transfer students with special needs from special education school into mainstream school, there is a chance that unidentified dyslexic students who are already in the mainstream be neglected – hence, the reasons for choosing dyslexia awareness as the TPD focal issue in this study.

The inclusive movement began decades ago, and much research has been carried out to investigate the success of its implementation. A review of literature by Lingard (2010) has raised a critical question of policy borrowing vs. policy learning. This critical question led to the search of:

- i. Types of TPD that enable the change agents to learn about new policy rather than borrowing it from other countries.
- ii. Dyslexia in Malaysia.

To get a direction to relevant literature which encompasses issues related to TPD for dyslexia, the researcher adopted an umbrella review method. Umbrella review is a review of a review that helps researchers to overview significant insights in particular areas of research from the earliest to the current times; and more ‘general framework of evidence synthesis and decision making’ (Biondi-Zoccai 2016, p. 3). With the study that requires the researcher to understand abundant of and multifaceted but connected data, the umbrella review methods are the most helpful. According to Grant and Booth (2009), the search of an umbrella review focuses on an overview of “what is known” to be recommended for practice; “what remains unknown” to be commended for future research (p.95).

According to Aromataris et al. (2015), umbrella review should be preceded by a protocol which clearly stated the inclusion criteria. There were two tiers of umbrella review applied in the study: pre-review and review. The pre-review of the literature review was carried out to assess issues related to TPD and dyslexia:

- a. Teacher Professional Development: An International Review from the Literature by Villegas-Reimers (2003);
- b. A Review of Definitions and Identifications of Specific Learning Disabilities in Malaysia and Challenges in Provision of Services by Dzalani and Shamsuddin (2014);
- c. Mental Health: Special Needs and Education by Peters (2010); and
- d. The International book of dyslexia: A Guide to Practice and Resources edited by Smythe et al. (2005).

The pre-review of the review of the literature led the researcher to focus on online TPD; transformational TPD; TPD message framing. The literature review on dyslexia led the researcher to focus on dyslexia awareness and neurodiversity or neuroscience education. The focus of the search was narrowed down to literature reviews of framing for dyslexia as neurodiversity awareness message. The inclusion criteria for the umbrella review suggested by Aromataris et al. (2015) is adopted:

- i. Participants – mainstream teachers, untrained teachers, and in-service teachers.
- ii. Phenomena of interest – dyslexia/neurodiversity awareness.
- iii. Context/ setting – online teachers' professional development, inclusive education, transformation, and justice.
- iv. Types of studies – qualitative study, training materials evaluation, frames, and framing of the messages.
- v. Outcomes – provide an overview of the message framing study, particularly on training materials, especially on dyslexia.

2.1 Gaps in the Literature

Review of theoretical and empirical literature showed that dyslexia awareness (Ajoku-Christopher 2012) and teaching confidence (Stark et al. 2016; Kormos and Nijakowska 2017; Srivasta et al. 2017; Kurniawati et al. 2017) among mainstream teachers are still immature in many parts of the world. Hence, the effort to raise teachers' dyslexia awareness and teaching confidence is imperative. With the evolution of the internet, the dyslexia awareness campaign can speed up (Oblinger et al. 2005; Holmes and Gardner 2006; Fyle 2013; Arkorful and Abaidoo 2015; Kormos and Nijakowska 2017). Thus, this study suggested an online Teacher Professional Development be

adopted in Malaysia so that all teachers would be aware of dyslexia. Nonetheless, there are challenges in online communication and conducting oTPD on complicated matters like dyslexia.

The existing literature shows that dyslexia has been studied extensively in developed countries (Høien and Sundberg, 2000; Reid 2012, 2016). The awareness of dyslexia among teachers in developed countries is almost established; consequently, research on dyslexia in developed countries has now moved into the intervention stage (Høien and Sundberg 2000; Kelly and Phillips 2016). In contrast, the people in most developing countries are still struggling to understand what dyslexia is (Abosi and Koay 2008; Ajoku-Christopher 2012; Dzalani and Shamsuddin 2014). Having a meaningful conceptual understanding of dyslexia is crucial for all teachers (Reid 2016) before pedagogical training on dyslexia identification and intervention begins. This is because, supports for students with dyslexia [within the inclusive context] are given due to social justice purposes, not simply educational purposes. Besides, the lack of understanding of what dyslexia is all about can make the implementation of inclusive education in Malaysia becomes complicated (Ali et al. 2006; Jelas 2010; Jelas and Mohd Ali 2012; Abdul Rahman and Nazariyah 2013; Dzalani and Shamsuddin 2014).

The existing literature also shows that when dealing with a policy reform related to social justice, the reforms agents' beliefs and awareness should be transformed first (Kennedy 2005; Fraser et al. 2007; Kennedy 2016). The transformation of the agents' beliefs is crucial as it serves as the foundation for cultural reconstruction (Fullan 2007; Grimaldi and Serpieri 2013; Hargreaves et al. 2014). In the context of inclusive education system, the primary change agents are the teachers. Educational policy reforms related to social justice aims at changing the culture of the education system that requires the teachers to be at their best in order to support the changes (Fullan 2007; Day and Smethem 2009; Hargreaves et al. 2014). A review of the literature on professional development and education reforms indicate that a transformative professional development should be provided to prepare the teachers' belief system before embarking to a transmissive professional development that prepares the teachers to the practical knowledge (Kennedy 2005; Fraser et al. 2007; Kennedy 2016).

Transformative professional development has been widely researched in the United Kingdom, USA, Canada, Australia, Finland and other part of the countries where movement for equal rights for education has begun to receive attention (Hargreaves and Fink 2006; Fullan 2007; Greene et al. 2008; Lingard 2010; Grimaldi and Serpieri 2013; Hargreaves et al. 2014) but less widely studied and implemented in most developing countries (Abosi and Koay 2008; Ajoku-Christopher 2012) and barely considered in Malaysia. Within the Malaysian educational context, reformation in educational policy has always been supported by transmissive professional development where

teachers were given pedagogical input on how the reconstruction of the education system is taught to be effective that resulting in high stakes census tests as measurement tools (Fullan 2007; Day and Smethem 2009); increase teachers' heavy workload (Azita 2012; Sharifah et al. 2014); and displaced teachers' values by 'terrors of performativity' (Ball 2003) that would jeopardise the success of the implementation of the educational change (Pajares 1992).

On the other hand, the success of any professional development depends on the strength of the messages presented during the event (Petty and Cacioppo 1986; Petty and Wegener 1998; Albarracín and Kumkale 2003; Evans and Petty 2003; Rucker and Petty 2006; Petty et al. 2007; Chia 2013). According to Weick et al. (2005), messages that make sense trigger the message recipient's action. As the medium of the TPD is proposed to be online, the theories of message framing facilitated by the multimedia presentation should be considered (Mayer and Sims 1994; Mayer and Moreno 2002; Mayer 2003; Kress 2009). Roberts (2018) claimed that visual images trigger the audience to think or not to think about a message which later lead to active learning compared to textual messages. Much research has examined effective message framing in various disciplines such as product advertising (Hirsh et al. 2012), medical campaign (Shen et al. 2015), agriculture campaign (Abrams and Meyers 2012), and green campaign (Kim and Kim 2014); yet, little work has explored message framing for teacher professional development and barely for dyslexia awareness. In addition, an extensive body of research studied the effectiveness of message framing by comparing audience's responses towards message framed as perceived gains and perceived loss quantitatively (Matthes 2009; Lee et al. 2008; Kim and Kim 2014) answering the macro-analysis question of which message is effective by analysing how many positively responded to the message. It is evident that micro-analysis of message framing is emerging in the medical field (Kreuter et al. 2007) and advertising (Hanita et al. 2008; Hanita and Van Leeuwen 2008). The study on the process that takes place between the audience and the message is still scarce in the literature.

This theoretical and empirical literature served as an umbrella review of researches in related disciplines and the starting point for the researcher to seek an understanding of the framing of messages on dyslexia that trigger the Malaysian teachers' learning as an affordance to promote dyslexia awareness.

2.2 Teacher Professional Development

Teacher professional development [TPD] is more than mere professional activities that enhance a teacher's knowledge and skills to teach. TPD, according to (Day 1999), undertakes a hugely complex intellectual and emotional endeavour of raising and maintaining standards of teaching

and learning. There are many stakeholders involved directly and indirectly in the education industry. Teachers are expected to not only contribute to students' academic success but also personal and social (Greenberg et al. 2003). Teaching is indeed a complicated profession as there are numerous roles for teachers to play. Teachers are accountable to their students as much as to their professionalism, autonomy and practice which may become the terrors and pleasures of the teachers' performativity (Ball 2003; Holloway and Bras 2018). The understanding of teachers' roles is crucial to facilitate the knowledge of the needs for TPD. The demands for TPD should have reflected the complexity of teachers' roles. If any of these roles were neglected in professional development, teachers' professionalism would be questioned. While acknowledging the importance of the understanding of the needs of TPD, it is also worth to notify that research that supplement teacher educators or TPD providers as change agents is limited (Margolin 2011). Thus, the review of literature on TPD in this study will navigate issues to be addressed by teacher educators or TPD providers in performing their role – to design and implement oTPD.

2.2.1 Teachers' Roles

Crosby (2000) listed the teachers' roles in six areas: the information provider; the model; the facilitator; the assessor; the planner; and the resource material creator. Ivic et al.(2001) also listed six categories of roles: teaching role; motivating role; evaluating role; cognitive-diagnosing role; social relations- regulating role; and emotional interaction partner role. Ben-Peretz et al. (2003) presented the teachers' roles in an exciting metaphorical way and categorized them in seven categories: the shopkeepers; the judges; the animal keepers; the entertainers; the conductors; the puppeteers; and the animal trainers. To sum up, there are two leading roles of a teacher: to develop general personal growth of students and to facilitate the acquisition of knowledge (Stojiljković et al. 2014).

Several studies revealed that most teachers relate themselves as the facilitators to knowledge acquisition as the centre of the teaching role. However, teachers regard themselves as babysitters or carers to low-achieving students, more than academic facilitator (Ben-Peretz et al. 2003). If teachers continue to care for low-achieving students in this dysfunctional image of teaching, the students' learning needs will be ignored. This will risk the students who are capable of learning but require specific needs. In future, Hornstra et al. (2010) recommended that "research on how to teach children with specific needs without stigmatization must be fostered" (p.526) as their findings show that teachers' negative bias towards children with dyslexia could affect the achievement outcomes of the students.

Undeniably, emotional competencies are essential for successful professional roles of teachers. Studies show that teachers need to not only be emotionally competent but also to be able to feel empathy (Stojiljković et al. 2014; Young 2016) for the students because the fundamental of teaching is moral (Campbell 2012). Hence, Young (2016) emphasised on the need to provide teachers “with the appropriate resources that will allow them to be empathic, including, professional development” (p.107-108). Such TPD would help to develop sensitivity towards students’ feelings and need that will be the strong foundation for commitment to inclusive education primarily to provide for the specific needs of each student. Nonetheless, inadequate relevant materials and TPD programmes remain as significant challenges in transforming the education system in Malaysia from semi-exclusive to fully inclusive (Eleweke and Rodda 2002; Youssoof 2008; Pei 2015).

2.2.2 Model of Teacher Professional Development

The design of a TPD can be determined by identifying its purpose and objectives (Kennedy 2005). Purposes and objectives of TPD can be seen through the lenses of teachers’ roles (Fraser et al. 2007; Stojiljković et al. 2012; Young 2016); policy and mandate (Kennedy 2005; Lingard 2010); and the expected outcome (Kennedy 2016; Young 2016). Once the purposes and objectives have been determined, the communication model of a TPD could be decided by considering the medium of the interaction (Mayer 2003; Kellsey and Taylor 2016) as well as the scale of the collaboration (Villegas-Reimers 2003).

Several TPD objectives include enhancing technical skills like pedagogical content knowledge, technological pedagogical content knowledge, assessment, and evaluation as well as teachers’ pedagogical belief in adopting a specific methodology to motivate students’ learning. The expected outcomes of TPD for policy renewal most of the time, emphasised on students’ growth. In such TPD, teachers learn about how students’ learn (Fraser et al. 2007) and mostly evaluated via tests and teachers’ teaching performance (Kennedy 2005). TPD for policy reform, on the other hand, aims at establishing values of the teacher as reform agents.

Empirical studies on policy reform indicate that implementation of the new policy should begin with the establishment of values and beliefs of the reform agents (Greene et al. 2008; Abdul Rahman and Nazariyah 2013; Young 2016). Most studies on professional development for policy reforms looked into inclusive education as a result of the No Child Left Behind movement; as a massive social change (Lingard 2010) especially when it was officially seconded by Salamanca conference delegates (UNESCO 1994).

With the movement of No Child Left Behind [NCLB] in U.S.A that has spread in many parts of the world and changes in educational policy that demand teachers' high accountability to provide equality, teachers are being oppressed. Halloway and Brass (2018) compared accountability apparatus utilised in two different educational policy reform agenda to examine the effects on teachers' judgment of their professionalism drawn from Stephen Ball's work on performativity. The first agenda concurred with the implementation of NCLB; the second agenda with the implementation of value-added teacher assessments in conjunction with Race to the Top [RTTT] policy. They discovered that the NCLB's high-stakes-testing mechanism upset the teachers as the teachers view themselves as a statistical target which intrudes their autonomy, professionalism, and practice. However, the RTTT's transformative accountability mechanisms that steer teachers' behaviour and understanding of professionalism satisfy the teachers they learned to know themselves and their quality.

Another study on teachers' accountability was conducted by Sahlberg (2007) who compare global education reform trends to Finnish policy. Finland represents counterpoint for global experience in policy reform reactions. Sahlberg (2007) highlighted that most education reform leading towards 'consequential accountability' while Finland opts for 'intelligent accountability and trust-based professionalism. Policy reform that takes on consequential accountability is inclined towards high-stakes testing. High-stakes testing incorporates curricula aimed at explicitly teaching to the tests (Au 2011); and build-up tense among teachers and several other harms to education systems (Berliner 2011). In contrast, high-stakes testing does not happen in Finland; teachers are also not being monitored because of the strong trust given towards teachers' professional autonomy. This resulted in pedagogies that are more creative and intellectually demanding.

Lingard (2010) who reviewed the global studies of the impact of policy reforms towards teachers' accountability, raised a critical question that sets a new direction of thinking in policy reforms: to borrow a new policy or to learn the new policy? Borrowing policy will make the borrower country undergo the same process and cycle of change, but learning the new policy will help the borrower country to adopt the idea within their context.

The challenge for policy reform is more complex and multifaceted (Kennedy, 2016). TPD for policy reform is set to establish values and belief at a micro [teacher as individual agent] and macro level [school/society; or local/international as a socio-cultural impact for a targeted change]. According to Wiener (1988), "values can be construed as internalized normative beliefs; once established. They may act as built-in normative guides to behaviour, independent from the effect of rewards and punishments as consequences of action" (p.535). If teachers' inclusiveness is embraced as

values rather than an education product, there is a chance for a successful implementation of the inclusive education system.

According to Fraser et al. (2007), teachers learn from personal, social and occupational experiences (Bell and Gilbert 1996) and that learning can occur either in a planned formal way or incidental and informal (McKinney et al. 2005). These learning opportunities can be located along the continuum of 'transmissive,' 'transitional,' and 'transformative' models (Kennedy 2005). The transmissive model focuses on technical aspects of the job, whereas the transformative model focuses on issues relating to values, beliefs, and attitudes. Transitional model, on the other hand, can support either the agenda of the transmissive model or transformative model. In addition to the general division of TPD agenda endorsed by Kennedy (2005) and Fraser et al. (2007) highlighted that the purpose of TPD might focus on teacher's growth as well as student's growth.

Fraser et al. (2007) highlighted a meaningful argument here. The researcher argues that all these 'transmissive,' 'transitional,' and 'transformative' models of TPD aim at enhancing students' growth even though it focuses on teacher's values, beliefs, and attitudes. A TPD may be implemented to teach teachers (transmit) on how to teach students; as well as to teach teachers about students, so that teacher's motivation is heightened [transform] to help students to develop. In this [TPD for student's growth] transformative context, TPD is set to be a platform for teachers' recuperation. In contrast, if TPD is implemented with the aims for teacher's growth, the teachers learning may be extended beyond the traditional transfer of knowledge, skills, and attitude purposes. TPD that aims for teacher's growth will focus on teachers learning for understanding of teacher professionalism [transformation] and learning as process of renegotiating professional meaning (Fraser et al. 2007). In that sense, transformative TPD is set to be a platform for teachers' nurture and foster learning interest of the teacher so that they can embark for further self-inquired knowledge.

Transitional professional development is part of transformative professional development. Transformation is the objective of a transformative professional development; and for a change to occur, according to Margolin (2011), "there is need to create a transitional space between the old and the new that enables the innovation to become a more stable" (p. 8). Via oTPD, transitional professional development may occur inherently, provided the intention for transformation is successfully triggered.

Overview of TPD models, (TPD purposes; and TPD expected outcomes; together with reviews of experiences from Finland and other countries) contribute to the understanding of the implication of the transmissive and transformative TPD that need to be considered by teacher educators or TPD providers. The arguments are concluded as follow:

- i. Transmissive TPD is a platform suitable for pedagogical product marketing while transformative TPD is a platform for social marketing of education. Both aims at different values and beliefs.
- ii. Transmissive TPD aims at pedagogical values and belief (such as teachers' beliefs in adopting particular teaching methodology) while transformative TPD aims at socio-cultural values and beliefs (such as teachers' beliefs about rights, i.e. human rights).
- iii. Transmissive TPD result in high-stakes census exams as a policy evaluation mechanism which may jeopardise the objectives of changing the values and beliefs as part of cultural reform. Transformative TPD is implicit, thus hard to be evaluated. Hence, the success of transformative TPD could not be assessed with restricted quantitative measurement but with a comprehensive evaluation.

2.2.3 Outcomes of Teachers Professional Development

When the government initiated changes in education, teachers are expected to be opened to change, resilient, and committed to the implementation. There is no doubt that the success or failure of the changes in education policy relies heavily upon teachers' commitment for the reason that "educational change depends on what teachers do and think" (Fullan 2007, p. 115).

Villegas-Reimers (2003) who studied literature on educational reforms across countries, however, found that most teachers do not open to changes easily. In fact most teachers view changes as disappointments and mere obstacles: as additional work that create hindrance and confusion (Day and Smethem 2009); as an instrument to control teachers (Klette 2000); as an attack to teachers' work and professional preparation (Chadbourne 2000); and as ignoring teachers' existing knowledge, beliefs and attitude (Van Driel et al. 2001). Nonetheless, according to Little (2001), teachers will be more flexible and enthusiastic if they can evaluate the benefits, the scope, the practicality of the changes, and the authority behind it. Such 'principled professionalism' is underpinned by strong values, beliefs, and moral purpose (Hargreaves 2003).

Teachers are intellectuals who can take an active role in resisting or embracing reform. Provided the aspiration for the changes is shared, teachers set their beliefs and ready to commit to the changes. According to Bandura (2001), some determinants of attention concern with the receivers are "the cognitive skills, preconceptions, and value preferences" (p.272). In addition, Fullan (2007) suggested that, "the best defence against the relentless pace of change is to build professional learning communities" that serve as support system for teachers to build their understanding, knowledge, and skills; as well as 'healing when ill-conceived or random change

takes its toll' (p. 272). It is vital, therefore, to establish teachers' values and conceptual understanding of the new policy before giving the teachers any other pedagogical inputs. Sachs (2003) suggests transformation should be democratic, research-focused, and collaborative so that teachers will immerse into the change, not just merely accept it as a mandate (Day and Smethem 2009).

The significance of the establishment of the awareness and policy-teachers shared inspiration has rarely been given sufficient attention in the design and planning of TPD. This is because, for the outcome of change in practice to be achieved, TPD participants' inspiration should be congruent with that of the TPD providers. Pajares (1992) found that beliefs are the main attribute that filter teachers' decisions in accepting or rejecting changes. Hence, it is essential to address and incorporate value-related issues in planning TPD that targeted on planned change such as TPD for Dyslexia management skill.

The objectives of TPD for dyslexia management skill are to equip teachers with knowledge and skills to identify students with dyslexia as well as applying intervention – which enables inclusive education to be implemented in Malaysia. The expected change in practice in the Malaysian curriculum is huge (Chong and J. Graham 2016), so it is crucial to prepare the teachers to walk the journey with a clear vision of the curriculum direction. By having a clear understanding and congruent value with the national curriculum, the teachers will enter the practical training session with more positive beliefs and ideologies.

Online TPD can be the platform for professional learning communities to develop their knowledge and skills required for the policy change; and twenty-four-hour available as support system tool for teachers to seek clarification, motivation, and encouragement throughout the changes. However - without the effort to establish teachers' awareness, beliefs, understanding, and other value-related issues- oTPD may not be of help to ensure the success of the implementation of the changes. With the inspiration to train teachers with skills to manage dyslexia and realise the inclusive education in Malaysia in less than ten years, it is imperative to ensure that teachers are aware of why they have to take part in the training before they go for training.

2.2.4 Advantages of Online Teachers' Professional Development.

The evolution of online teaching and learning has maximised knowledge acquisition. Web-based education technologies such as e-learning, distance learning, online course, virtual classrooms, interactive learning, and most current massive open online courses [MOOC] are commonly used outside the traditional education systems. The rapid development of web-based education illustrates the learners' acceptance of their effectiveness.

Holmes and Gardner (2006) outlined seven advantages of online learning: i) flexibility of time and place; ii) enhance knowledge efficacy; iii) platforms for discussion; iv) cost effective; v) accommodate learners' differences; vi) compensate resource scarcity; vii) increase learner's autonomy. Arkorful and Abaidoo (2015) listed six advantages of adopting online learning in higher education: ii) enhance knowledge efficacy; iii) platforms for discussion; iv) cost effective; v) accommodate learners' differences; vi) compensate resource scarcity; and vii) increase learner's autonomy. All of these benefits are seen as learners' centred. These learners' centred advantages are the main reasons for the learners' engagement. This is because, for one to decide on using tools in their teaching and learning experience, the tools should appear to benefit users and ease the users' lives (Laurillard and Masterman 2009).

According to Smedley (2010), online learning provides learners the luxury of receiving and giving information at any time convenient to them. Added by sources such as Google and Wikipedia that are available on personal, mobile, and digital technologies (Oblinger et al. 2005), teaching and learning nowadays are not constrained physically or temporally. The online learning opportunity is especially an advantage to adult learners who acquire learning environments that offer equal access to information regardless the users' locations (Khan 2005) as adult learners need to juggle their times for personal, working and studying needs.

Enhanced by Web 2.0, not only that teaching and learning has become more interactive and cooperative, net-generation learners now are exposed to internet access and could take charge in building up their knowledge. Rather than utilizing web (Web 1.0) as publishing media, Web 2.0 was formulated for the web as participation platform (O'Reilly 2005) that encompass knowledge quest endlessly - especially in current lifestyles, use of personal, mobile, and digital technologies is frequent (Oblinger et al. 2005). Discussions, forums, notes publishing, and note sharing are now done within the virtual environment. In this era, it is hard to claim that learners retrieved knowledge solely from face-to-face classes (Moskal et al. 2006). There are mostly possibilities to retrieved knowledge outside the classroom – an excellent advantage for busy teachers.

Teachers in Malaysia carry a heavy workload. The workloads refer to responsibilities assigned to teachers inside and outside classrooms (Muhammad Shukri 1998). These responsibilities include teaching and learning, co-curricular activities, file management, meetings, and anything related to the official duties as a teacher (Azita 2012). In comparing Malaysian teachers' workloads to that of the United Kingdom and New Zealand, Sharifah et al. (2014) found that teachers in Malaysia were more overloaded with the number of hours they worked than the teachers abroad with up to 15.19 hours per week difference; total workload of teachers overseas is not more than 51 hours for secondary school teachers while for primary school teachers it is not more than 53 hours a

week. This heavy workload has forced schools to hold activities on the weekend like Saturdays for extra classes, sports practice, class cleanliness, and club and society activities as well as for in-service teacher training (Azita 2012). These findings suggested that teachers in Malaysia have to make confined arrangement for TPD, especially if it is arranged as face-to-face. Face-to-face TPD demands teachers to travel and meet up at a common meeting point, which costs more times to travel and money.

Even though online learning requires a stable set-up of internet and computer facilities that cost a massive amount of money, in the long run, oTPD is proven to be cost-effective (Ahmed 2016). Not only that teachers need to spend less time and money for traveling, but also it saves the government's money for space rental and maintenance fee. As TPD is online, there are more vacancies for teachers' participation. This is ideal for overcoming the acute shortage, particularly in developing countries (Fyle 2013) as they enable unlimited enrolment (Cuzack 2014). With the allocation of 2,145.1 million funds for ICT and infrastructure facilities resources to schools during the 8th Malaysia Plan (Samuel and Bakar 2007), it is anticipated that many school teachers would benefit oTPD.

All over the world, there is an emergence of online learning communities. The current online education trend, MOOC, is open to everyone, mostly with no charge (Santur et al. 2016). This is an excellent opportunity for anyone who has budget constraint but hungers for knowledge.

In Malaysia, the use of ICT is dramatically increasing (Azman et al. 2014). Malaysian quest for information instantaneously and share them via social media that cost less than circulating information across readers via printed copies (Jayabalan et al. 2016). Less cost of information circulating illustrates an opportunity for cheaper knowledge circulation cost. In their handbook entitled *Using Technology to Train Teachers: Appropriate Uses of ICT for Teacher Professional Development in Developing Countries*, Gaible and Burns (2005) divided oTPD into three modes: self-directed, online courses, online communities. All these three modes are usually used in a combination that creates a potential for multi-channel instruction. Therefore, it is expected that oTPD may reduce problems with the scarcity of expert facilitators.

In Malaysia, there is an issue of lack of trainers in special needs education that is available to train all teachers in mainstream schools. Via online experts or specialist teachers may facilitate teachers participating in the training without having to appear in front of the participants physically. If training is scheduled as part-time, experts may assist more than one group of teachers in one day from all over the places. Online learning is more interactive nowadays compared to the early days it was introduced, ranging from interactive discussion platforms to interactive learning quizzes and activities (Santur et al. 2016) for learning enhancements. Learners

may even watch a lecture via videos that make online learning almost like traditional learning — however, there a lot for online learning researchers to explore to increase online learning interactivity.

Another advantage of online learning is that teachers and TPD providers may have access to TPD resources from the top-tier institution (Gaible and Burns 2005). Nowadays, especially with the emergence of MOOC, common interest experts, and professionals gathered to offer their expertise to learner worldwide (Liyagunawardena et al. 2013). In many occasions, online education requires good internet connection and infrastructure. In remote places where minimum capacity and infrastructure requirements for oTPD are not met, experts may be required to travel to the teachers physically but the amount of work and independence on experts has been reduced as in other areas where minimum capacity and infrastructure requirements for oTPD are met, there are options for online resources.

Earlier critics on online learning highlighted social presence as a key component of online learning, arguing that (computer) mediated interactions seem unmediated (Kumar and Benbasat 2002). These views of social presence relatively emphasise human agency in mediated social processes. Debates on social presence in online learning have initiated researchers to explore on learning designs that enhance interpersonal communication, social cognition, and theories of mind (Biocca et al. 2003). According to Kehrwald (2008), communication and interaction in online environments is a potentially very different experience than face-to-face interaction. Therefore, social presence should be viewed accordingly. Facilitators should facilitate human with online materials whose roles are to expedite text, images, and ideas to the participants (Evans 2015). Like the previous generation who successfully learn from broadcast radio and television and teleconferencing, online learning allows experts to be virtually present (Moore and Kearsley 2011).

In this study, oTPD is seen as an affordance to raise teachers' dyslexia awareness. With the opportunities that online learning could offer such as increased access to learning, enhance life-long learning, and increase the ability for interactive teamwork between groups, access to experts worldwide and an enormous volume of online databases – it is hoped that more teachers can be trained to provide support for dyslexia.

2.3 Linear Communication and Online Professional Development

TPD can take place in a traditional face-to-face form, or current online or blended media form. The main argument that is central to online TPD is the issue of social presence (Garrison et al. 2010). Online communication nowadays can be the interactive and social presence of the expert

figures can appear at multilevel (Garrison et al. 2010). Nonetheless, before any teachers could be ready to explore knowledge prepared by oTPD, their interest needs to be triggered. The form of communication during the triggering process is initially a linear form of communication or also known as an action model of communication.

The term 'action model' is commonly used in science field like molecular systems biology (Chen et al. 2009) and modelling information for the electronic medical record (Russler et al. 1999). It has also been used by Hargrave and Van de Ven (2006) to view institutional change as a dialectical process – which they introduce as 'Collective Action Model of Institutional Innovation.' In the area of psychology, Weiner (1980) named his model of judgments of help-giving as 'Cognitive (attribution) – Emotion – Action Model of motivated behaviour.' Edwards and Potter (1993) reconceptualised language as social action – proposed 'Discursive Action Model' for causal attribution investigation in the psycholinguistic area. In the study of communication, the term 'action model' (also known as the linear model) is drawn from Lasswell's formula which demonstrates the process of information transfer produced by the message sender to stimulate message receiver's reactions (McQuail and Windahl 2015). By making inferences on how the term action model is cast in different disciplines, the researcher concludes that the term 'action model' can be defined as a model that illustrates a process that corresponds to an action.

Action model in the study of communication is also known as the linear model. There are three communication models: a) Linear [action] Model; b) Interaction Model; and c) Transaction Model. Action model is a one-way communication model where the meaning of the message is fixed by the sender to initiate the receivers' feedback [action]. In this model, the sender is responsible for faults for problems (Dayton and Henriksen 2007). It is essential to understand that people will only clarify when they are confused. People rarely notice their misunderstanding until further interactions occur. The action model is the fundamental model of communication in the oTPD facet. Applying action model in framing messages could reduce the risk of communication fault as an effect of the missing-facilitator-presence during oTPD. Even though there is an opportunity for interaction in online education, the chances are limited as compared to face-to-face education. Hence, it is essential that oTPD providers reduce communication error when considering message framing while designing an online module.

Action model' [also known as the Linear Model] is drawn from Lasswell's formula which was then extended by Braddock (1958). According to Lasswell (1948), a convenient way to describe an act of communication is to answer 'who says what in what channel to whom with what effect.' Lasswell's formula, although simple, according to McQuail and Windahl (2015) sets a typical trait of early communication model - and considered relevant and useful for communication today

(Sapienza et al. 2015). This model illustrates the intention of the sender to influence the receiver in communication. Lasswell's formula with corresponding elements of the communication process is illustrated in the diagram in figure 2-1.

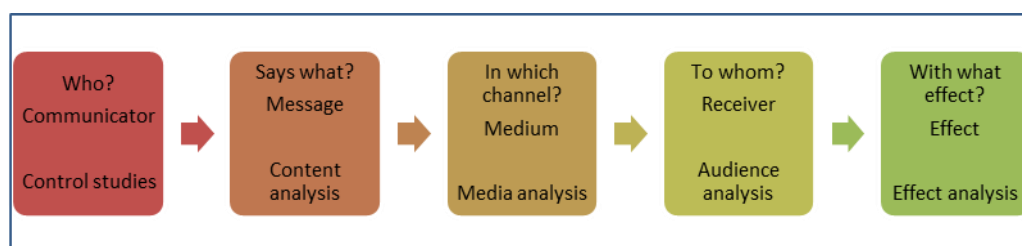


Figure 2-1 Lasswell Formula with Corresponding Elements of Communication Process
(Source: McQuail and Windahl, 2015)

Braddock (1958) found two more aspects in the communication process that distinguish message framed by one sender to another sender or the same sender in different events: a) under what circumstances; and b) for what purpose do the communicator deliver the message. Braddock extends Lasswell's model, as shown in figure 2-2. Braddock's formula allow communication scholars to explore communication as a cultural context that is diverse (Biswas et al. 2017).

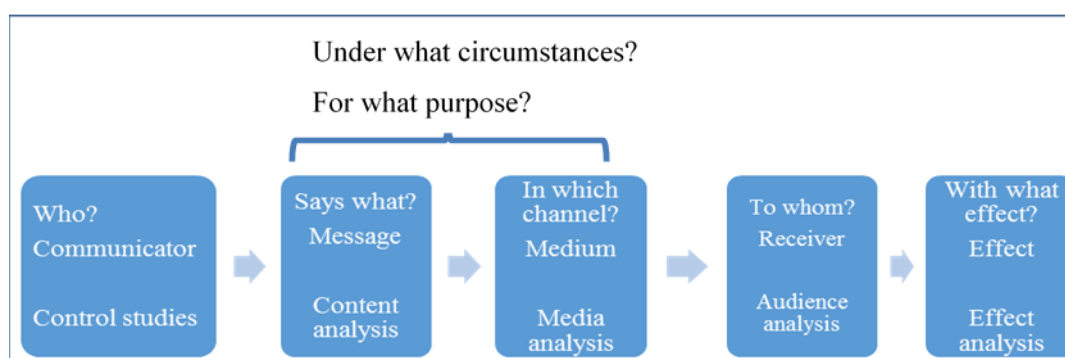


Figure 2-2 Braddock's Extension of Lasswell's Model. (Source: McQuail and Windahl, 2015)

According to McQuail and Windahl (2015), traces of Shannon-Weaver's (1949) mathematical model has been found in later models of linear communication. In addition to the earliest communication introduced by Lasswell and Braddock, Shannon and Weaver identified one dysfunctional factor that may be the source of interference as presented in figure 2-3.

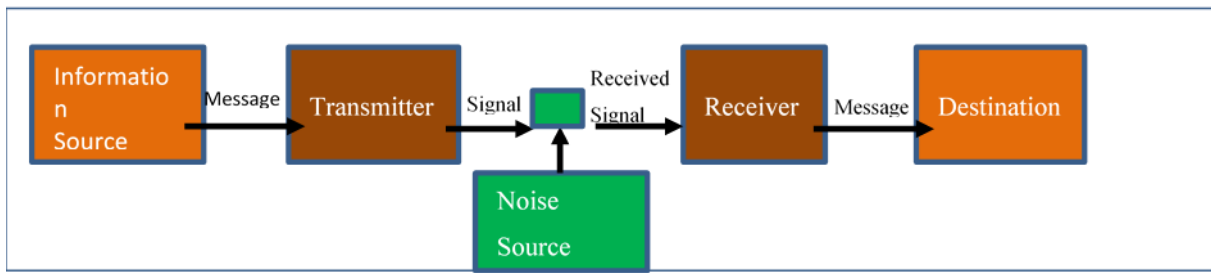


Figure 2-3 Shannon-Weaver's 'Mathematical Model'. (Source: McQuail and Windahl, 2015)

A combination of Lasswell, Braddock, and Shannon and Weaver's models expands the whole linear communication process. The expansion of the linear (action) model is illustrated as in figure 2-4.

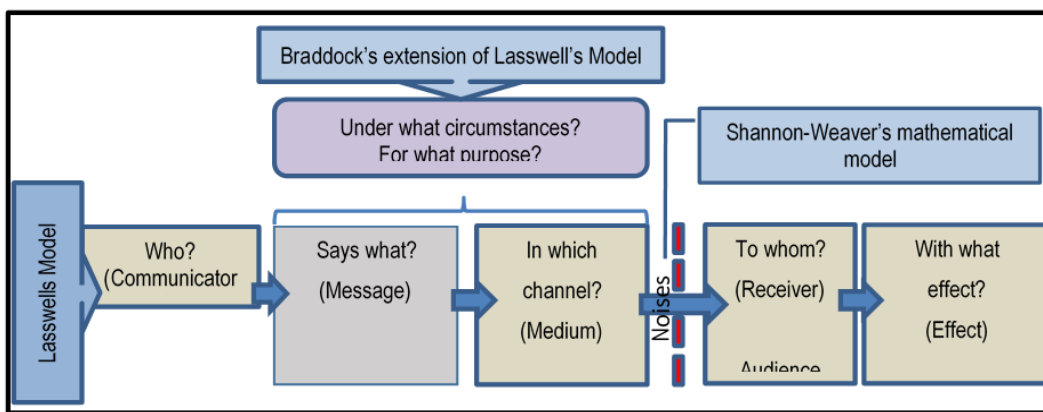


Figure 2-4 Expanded Linear (action) Communication Model

Interference in communication may hinder the meaning-making. Meaning making is highly dependent on contextual-cultural information. According to Osborne et al. (2016), the differences in perception and linguistic meaning has implications for teaching contexts. These differences interfere, meaning reconstruction by the receiver that caused them to arrive at the destination with different perception – a common source for failure in communication (McQuail and Windahl 2015). If TPD developers take into considerations of the circumstances and the purpose of the training [Braddock extension model], as well as the possibility of interference [Shannon and Weaver's mathematical model] during the designing process of oTPD, chances for success, will be higher.

Where the goal of the TPD is to facilitate teachers' belief in learning about teaching profession that is mapped onto a policy reform agenda, the concern is about social presence. Building on the affective expression dimension, Garrison et al. (2010) described social presence from an overlapping multi-dimensional perspective. The overlapping multi-dimensional social presence occurs within the open communication which reflect the purposeful nature of the community;

and group cohesion which reflects the collaborative nature of the community and its activities (Garrison et al. 2010). Nonetheless, these notions of open communication and group cohesion could only occur when the positive messages manage to trigger teachers' interest to explore the new knowledge. According to Kellsey and Taylor (2016), the central part of a digital pedagogy model is the messages that are communicated. Hence, it is crucial to understand how to frame messages [the context and the medium] that could trigger teachers' learning.

2.3.1 Online Instructional Design

As news and stories travel fast nowadays, readers explore a massive amount of information at one time – hence, more comprehensible information is favourable. These phenomena increase the interest in research on innovative communication pattern. The early theory that spark interest in this research area is dual coding theory, a theory of mind introduced by Paivio theorises that human being representational system is divided into verbal and non-verbal (Clark and Paivio 1991). This theory has inspired many works on computational thinking. As a result, data visualisation in a different form of illustrations has been exploited to assist in complicated information. The advancement of media communication technology later yielded interactivity that optimizes the effect of communication. Based on the dual-coding theory, Mayer and Sims (1994) extended Paivio's dual coding theory to investigate computer-based instruction using words and pictures and proposed the generative theory of multimedia learning. The theory posits that when exposed to a material comprised of both verbal and visual contents, learners will categorise the verbal and visual information and organise the representation accordingly before integrating these two modalities into their presentation. Both theories concluded that learners who process information with both channels could recall the information more quickly, hence can understand better and (Plass et al. 1998) because when processing with both retrieval routes a unified mental model can be reinforced (Gellevej et al. 2002).

According to Mayer and Moreno (2002), multimedia instructional messages are presentations of material using word and pictures. In analysing the impact of message framing [verbal and non-verbal] on readers' meta-awareness, the dual coding theory, split attention, and redundancy effects will be considered in the current study.

2.3.2 Dual Coding Theory, Split Attention and Redundancy Effect

There is much research on the verbal-nonverbal model of communication across the world including recalling process among Asian ethnicity (Yui et al. 2017); English and Italian (Anderson et al. 2017); Cross-cultural audience (Zhao 2016) utilised dual coding theory. Paivio's Dual Coding

Theory predicted that the text-based models decode abstract nouns' neural activity more accurately than the image-based model; both image and text-based models decode more concrete nouns' neural activity. The dual coding theory prediction is supported by Anderson et al. (2017) study on brain activity patterns while reading and imagining abstract and concrete nouns.

Human minds search for references by integrating information. Sweller (1999) explained that learners or audience who read the statement would search for resources as a reference in order to understand the given statement. The missing reference will increase working memory load as the mind needs to dig out information in the memory files and integrate it with the statements. This phenomenon is known as the split-attention effect. The split-attention effect is related to cognitive load. The assumption is that integrated information formats reduce cognitive load compared to information with split-source formats. However, the integration of the verbal and images information would enhance learning- a relevant process when it is presented as schema induction and increase the germane load (Cierniak et al. 2009). Germane load mediates the split-attention effect. According to Kruger et al. (2014), human exploits the semantic parts of the modality to visual it as a composition. The germane effect is beneficial as it points out directly towards the information designed to trigger learner's attention (Sweller et al. 1998). Kalyuga et al. (1998), found that inexperienced electrical trainees learned better from diagrams of electrical circuits with integrated textual explanations because their split attention was reduced – in contrast to experienced electricians. It is concluded that learners benefit from integrated format but not for expertise (Kalyuga 2009). Thus, the expertise reversal effect suggested that instruction should be made tailored to the levels of learner expertise.

The expertise reversal effect happened because, with the experts' knowledge background, the image representation appears as fully intelligible and provides sufficient information. Therefore, adding text to recapitulate the image will interfere with the learning process. This situation is defined as the redundancy effect. Both representations should be neutral (Sweller 1999) and complement one another (Mayer and Moreno 2002) in order to optimise the learning experience.

Nowadays, with web 2.0 applications, images are complemented by other representations known as metadata which serve as supportive information or substitution for the data itself (Tousch et al. 2012). Each affordance of the modes that shape the image constructed specific knowledge about the matter in the specific position. Hence, "in a multimodal environment, the possibilities for choice and selection multiply well beyond those in a mono-modal one" (Kress 2011, p 42). Ginns (2006) explained that the replacement of written explanatory text and another source of visual information with a spoken explanatory text and a visual source of information causes the modality effect. Nonetheless, the human visual system can readily recognise thousands of the

algorithm categories (Tousch et al. 2012) and can see them in. Framing is defined as the contextual features of a message (Vliegenthart and Van Zoonen 2011). The interpretation of the message is led by the message sender who selects the framing that is biased on the sender's interest or objective (Baden 2010; Kress 2011).

2.4 Dyslexia

The Salamanca framework has been set as the principle in implementing special education yet, each country's interpretation of the context varies. Studies on dyslexia in many developing countries found that shortcomings in interpreting dyslexia hinder efforts to develop students with dyslexia (Saravanabhavan and Saravanabhavan 2010; Ajoku-Christopher 2012; Dzalani and Shamsuddin 2014). In developing countries, the understanding of special education is still unclear (Abosi and Koay 2008). Brown and Bell (2014) who conducted a study to examine professional and parental perspectives of dyslexia in Bangkok claimed that there might be misconceptions among teaching staff especially in the area of dyslexia – they are aware of the existence of dyslexia but the understanding of what dyslexia is missing. In Malaysia, even though the Ministry of Education preferred the term Specific Learning Difficulties [SLD] to be employed in managing problem with Dyslexia, the term Learning Disabilities [LD] and Dyslexia are commonly and widely used (Dzalani and Shamsuddin 2014). The broad generic definition of learning disabilities is adopted, and this approach post challenges in providing support and services for those with these disabilities. Hence, in Malaysia, the definition of learning disabilities is established mainly for registration purposes for support and services. The situation is the same in Nigeria. The society, including senior government officials, perceives learning disability issues in terms of welfare and charity (Lang and Upah 2008). The provision for children with disabilities across developing countries has often been regarded as a privilege rather than a right (Alur 2001).

It is agreed that the manifestation of dyslexia depends not only on the cognitive profile of the individual but also the individual's own linguistic, cultural, and legislative context. It is noteworthy to understand that in many developing countries, dyslexia is yet to be acknowledged as a specific learning difficulty (Ajoku-Christopher 2012). This is quite contrary to many developed countries where there is growing interest by special needs educators in interventions which focus on presumed underlying processing difficulties (Norwich and Lewis 2001). Most professional expressed their concern about education for people with disabilities in developing countries (Alur 2001; Villa et al. 2003) as the lower level of awareness, together with the society's beliefs and values towards people with disabilities do affect the provisions and decisions that can be made for people with disabilities.

2.4.1 Evolution of Dyslexia Theories and Inclusive Education

Dyslexia has a fascinating history, and the scientific research on dyslexia has vigorously taken place for the decades in various disciplines. Previously, there were two models of dyslexia: Deficit [medical] model and Social [educational psychology] model. Recently, it is observed that the neuroscience education model is taking place. Deficit models of dyslexia are commonly used in a medical perspective that categorised dyslexia condition as ‘disability’ and ‘mental illness’ (Graby 2015). In contrast, the social models of dyslexia opposed the notion of disability and mental illness because of its attribution to social exclusion and oppression; and claimed that the impairment stigma disables many of the dyslexics. The social model of dyslexia replaces the idea of deficit with difficulty (Cooper 2014) which promote the ability of the people with dyslexia. For several years, there were discrepancies between the research on dyslexia in medical and social perspectives: in medical perspective, dyslexia is considered a form of disability for which social justice researchers vehemently oppose the label. Despite the difference between the medical and social views, dyslexia is mutually defined as a learning difficulty that affects reading and spelling accuracy and fluency, which occurs across the intellectual abilities array (Rose Report 2009) due to problems with the decoding process (Shaywitz and Shaywitz 2005; Snowling 2013). A comprehensive definition of dyslexia adopted by the International Dyslexia Association (2002):

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge. (<https://dyslexiaida.org/definition-of-dyslexia/>)

Arguments about dyslexia evolved from whether dyslexia exist or not. As medical science has proven that dyslexia exists, they started to argue on the causes, the definition as well as the remediation. Frith (1995) offers a shared theoretical framework on dyslexia, its causes, and possible cures described from a behavioural, cognitive, and biological level. Frith’s causal model has been widely adopted and is considered the most helpful (Riddick 2001). It balances both medical and social views about dyslexia. Riddick (2001) recommended that the social model of disability to be utilised in addressing dyslexia for inclusive education so that the negative attitude of the society towards dyslexia can be avoided (Oliver and Barnes 1998). Elliot and Grigorenko’s dyslexia debate (2014) has caught many attentions. They questioned on the arbitrary cut-off in the diagnosis for dyslexia. According to them, the uncertain criteria for dyslexia diagnosis lead to exploitation for learning accommodation. Nevertheless, if we consider to view the matter from

dilemmatic analysis as suggested by Norwich (2007), the issue of fairness should not focus on who might have taken the advantage but rather on who might be unnecessarily left out if the accommodation is taken away. Unlike other decision making perspectives that distinguish good choices from bad choices, a dilemmatic analysis allows educational analyst to view choices which are favourable. The value is in its relative neglect in the inclusive education for learners with special educational need. A dilemmatic view offers some balance in the decision making which acquire compromise – giving up or loss of valued principles or desired outcomes. As Gewirtz and Cribb (2002) pointed out, the policy for inclusion promotes society solidarity. It is a form of distributional relational justice that distinguishes the relationship between individual and groups within a society. Therefore, it relies heavily on the society especially teachers' correct conception and beliefs about the nature of the difficulties (Jordan et. al. 2009). It promotes inclusion and replaces integration (Reid 2019).

Zadina (2015) asserted that 'neuroscience does have a role to play in education reform' (p. 71). It could inform teachers' professional development especially when there is dyslexia misconception related to neuro-myths. According to Howard-Jones (2014), the misunderstanding about how the brain of people with learning difficulties function influences teachers' opinion of learners with learning difficulties. This indirectly affects the support for the learners. As an example, the neuro-myth that relates learners with dyslexia to letter reversal will cause dyslexic learners who do not write letters in reversal orders to be at-risk of being neglected and not getting the necessary accommodation. Teachers who have a better understanding of the cognitive load and working memory limitation juggled by the learners with learning difficulties could teach and design lessons that accommodate the learners (Zadina 2015).

Research on dyslexia becomes more interesting when brain imaging technology advances to provide a significant opportunity to study brain functions and the neural basis of cognition. The functional magnetic resonance imaging [fMRI] allows scientists to safely examine cognitive processing among children (Thomason 2009). This allows neuroscience researchers to study brain activities among children with dyslexia.

A review of the literature indicated that numerous studies proved that the dyslexic's left hemisphere brain demonstrated dysfunctionality in the three-region reading network (Barquero 2014). Shaywitz et al. (2002) studied brain activation pattern to 70 dyslexics and 74 non-dyslexic children using fMRI during word-reading tasks. They found that there are significant differences in the neural systems for reading between dyslexic and non-dyslexic children during phonological analysis. The findings provide neurobiological evidence that indicates the young dyslexics also demonstrated a disruption in their neural systems for reading like adult dyslexics. The scientific

recognition suggested that poor phonological skills contribute to the poor development in reading accuracy since early age - makes adult dyslexic remains as slow, non-automatic readers. It also suggested that dyslexic children may be assisted to 'develop an awareness of sound structures of the word' (p. 108). Thus, it upheld the principle of the social model that dyslexia is a form of learning difficulty, not learning disability. Consequently, remarkable efforts have been made for reading interventions: focusing on explicit instruction which addresses the reading components of phonological awareness, phonics, fluency, vocabulary, and comprehension (Barquero 2014).

According to Gabrieli (2009), reading remediation via phonological awareness and decoding strategies improve many young children reading skills, and 50% of children maintain their reading ability after returning to the standard curriculum. Nonetheless, the fMRI study indicated that dyslexic children do not further catch up to typical readers. Such improvements occur at learning-to-read stage among children ages 6 to 8 years (Gabrieli 2009). Studies on reading-to-learn skills among older children indicated that although word recognition leads to reading comprehension deficits, readers also engage with executive function [working memory and planning] to comprehend their reading. Sesma et al. (2009) examined the contribution of executive function to reading comprehension among 60 children ages 9-15 years. They found that reading comprehension requires the executive function to succeed, unlike word recognition. The fMRI findings by Rimrodt et al. (2009) showed that children with dyslexia do not comprehend sentences in the same manner as children without dyslexia. It was found that different part of the dyslexic' brains was activated as well during the reading comprehension task. Sesma's and Rimrodt's findings affirm that dyslexia is not a form of mental disability as dyslexic brains work well during the comprehending process. Hence, dyslexia cannot be prevented or cured but can be managed (Gabrieli 2009; Rimrodt 2009).

The fMRI findings bring in a new synergy between education and cognitive neuroscience (Gabrieli 2009). In recent years, dyslexia is more recognised as a difference rather than a deficit or difficulty in cognition and learning. The findings revealed the 'deficit in normal reading part of the brain' as the weakness but the 'activation in other reading parts of the brain' as the strength of dyslexia. Thus, supporting the Neurodiversity movement, which has not only recognised dyslexia as a 'difference' but also promotes the strengths of dyslexia (Armstrong 2015). With the rise of the movement, several neurodiversity projects have started to call the newly emerging social model of dyslexia as Neurodiversity model (Griffin and Pollak 2009; Cooper 2014).

Neurodiversity paradigm suggests that some human's brain is differently wired and celebrate it as an asset (Armstrong 2012). One of the celebrating facts is that dyslexics' mental processing is three-dimensional [3D] which make them visual thinkers who see the big picture (Ehardt 2009)

and logically gifted (Shaywitz 2005). Due to their preferences for visual representations processing (West 2009), most dyslexics have a peculiar tendency to creative thinking, especially in a situation that requires alternative decision making (Cancer et al. 2016). Although dyslexic is tested to be more creative than non-dyslexic, Kapoula et al. (2016) discovered that education influences creativity in both dyslexic and non- dyslexic teenagers. Therefore, the notion of giftedness in discussing issues related to creative thinking among dyslexics should be cautiously managed. Figure 2-5 below illustrates the evolution of theories of dyslexia and their contribution to the making of inclusive education policy.

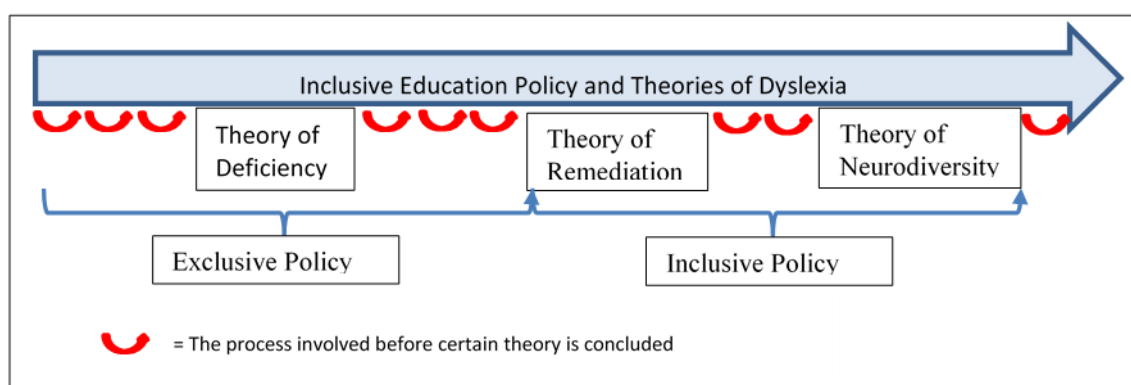


Figure 2-5 Evolution of Theories of Dyslexia and Their Relation to Inclusive Education Policy (Rahman and Woollard 2019)

The researcher's observation on dyslexia training programmes by British Dyslexia Association [BDA] and International Dyslexia Association [IDA] shows that starting 2017, both associations have begun to refine their programmes based on neurodiversity framework. Both programmes are contributed by a total of 10 groups of Dyslexia experts. IDA programme is research-based while BDA is fieldwork based. The recent development in dyslexia research is encouraging; however, according to Snowling (2013), "unfortunately, the field of dyslexia is plagued with supposed 'cures' that have no proper evidence base. It is therefore vital for professional to critically review the content of available programmes to ensure their suitability" (p 12).

The evolution of research findings and theories of dyslexia has driven the researcher to explore the LINUS programme in Malaysia. The researcher discovered that the LINUS programme is developed based on the mastery of literacy and numeracy skills. Via LINUS programme, level 1 students (year 1 to 3) undergone screening test and those who have not acquired basic literacy and skills will be enrolled for the remedial classes (Ministry of Education Malaysia 2013). Review of literature reveals that LINUS is a successful literacy and numeracy skills mastery project (Ong Luyee et al. 2018); yet to facilitate specific reading difficulty (Abdul Rahman and Nazariyah 2013). Abdul Rahman and Nazariyah (2013) found that the headmasters in the study were confused with the complexity of learning difficulty and were not familiar with the development of children who

were still following LINUS programme despite been given pre-school education. Previous literature reviews indicate that Malaysian teachers' awareness of dyslexia is considered low (Masitah et al. 2009). This is because the number of professionals with specialised training to deal with the identification of those with specific learning disabilities in Malaysia is limited (Peters 2010; Dzalani and Shamsuddin 2014). The biggest challenge, however, not only rely on training the teachers with skills to manage children with special needs but to shift the teachers' thinking paradigm (Marimuthu and Cheong 2015) so that the teachers' conceptual understandings of the dyslexia difficulties (Jelas 2010) and the dilemma of the issue of inclusive education (Norwich 2007) can be enhanced.

The implementation of inclusive education for learners with learning difficulties require a dynamic shift of assumption from impairment to difficulties (Norwich 2007) which can be offered via neurodiversity framework (Graby 2015). According to Graby (2015), the neurodiversity framework bridges the gap between the social construction of disability and difficulty. The core principle, informed by neuroscience research, is that neurodiversity is a condition that is real and neurological in nature. It should not be seen as a pathology needing a cure but as natural differences which should be accepted and accommodated. Neurodiversity movement focuses on strengthening the strengths and accommodating the weaknesses of people with SpLD such as dyslexia. It enables people with SpLD to be included in mainstream education rather than excluding them from the mainstream to be cured or sent for rehabilitation.

With the literature mentioned above, reviews on the evolution of dyslexia theoretical frameworks and the current provision for dyslexia support programme in Malaysia, the researcher believes that this study should focus on neurodiversity framework.

2.4.2 Empirical Studies of Dyslexia Awareness in Malaysia

In 2010, Peters (2010) reviewed the literature of epidemiological features of learning disorders and comorbidities in Malaysia using Cochran library keyword search. He compared the available statistics for learning disorders from the WHO with records for the year 2007 from the Ministry of Education in Malaysia. The findings suggest that at least 354,400 children are affected with Dyslexia in Malaysia compared with 306 recorded cases in 2007, far less than the expected possible range. It was concluded that the present undersupply of adequate service for children with learning difficulties is aggravated by the lack of systematic developmental screening in early childhood in Malaysia. Peters (2010) claimed that this status affects the outcomes and development of the general education system in efforts to meet challenges in the new century

especially when Developmental disorders are confused with learning disorders and other related or underlying impairments such as attention deficit disorders.

Before Peters' statistical analysis of Dyslexia in Malaysia, Sylvia (2009) conducted a survey on 143 teachers from seven selected national primary schools – four schools with the non-inclusive education programme and three with the inclusive education programme, in Kuching, Sarawak. The findings revealed that the teachers had a basic awareness of dyslexia yet lacked the awareness of specific symptoms of dyslexia, which was crucial in the early identification of students with dyslexia. The findings are parallel to the study by Masitah et al. (2009), which claimed that Malaysian teachers' awareness of dyslexia is considered low. Dzalani and Shamsuddin (2014) claimed that the limited number of professionals with specialized training to deal with identification of those with specific learning disabilities and lack of standardized and culturally sensitive measurements are other challenges faced in catering problems with Specific Learning Disabilities in this country.

Dzalani and Shamsuddin (2014) reviewed issues on differences in definitions and terminologies of specific learning disabilities used in Malaysia compared to those used in some other countries based on published and unpublished materials on learning disabilities/specific learning disabilities. According to Dzalani and Shamsuddin (2014), generally, there are two different approaches for defining Learning Disabilities. First, is the definition used in the medical field while the other refers to the one used by the educational and social services such as those provided by the Ministry of Women, Family, and Community Development and the Ministry of Education. For social welfare purposes, medical officers are compelled to use the term 'learning disabilities' as imposed by the Social Welfare Department for disabilities registration. However, local articles on Learning Disabilities written by health care providers continue to use the term learning disorders' (Amar 2008) or its specific subtypes such as 'dyslexia' (Che Normah et al. 1999). The Ministry of Education Malaysia recognised SLD as a category of students with special needs. The Ministry of Education refers to the term SLD to students who are unable to learn in the mainstream education classroom setting. The ministry, through its Special Education Division, refers to the term 'learning disabilities' to a group of students with special needs who has learning problems in schools (MoE 2012). Their learning difficulties could be due to intellectual dysfunction, neurological syndromes, and neurological processing problems. The term 'learning disabilities' as used by the Ministry of Education is the same as the one that is used by the Social Welfare Department. However, the Ministry of Education has also established its definition for the SLD condition, which refers dyslexia to individuals who seemed to have intellectual functioning equivalent or above typical students at a similar age but have significant difficulty in spelling, reading, and writing.

Even though the Ministry of Education preferred the term Specific Learning Difficulties to be employed in managing problem with Dyslexia in Malaysia, Dzalani and Shamsuddin (2014) found that the term LD is more commonly used than the term SLD. The broad generic definition of 'learning disabilities' is adopted, and this approach poses challenges in providing support and services for those with these disabilities. The definition of Learning Disabilities is established mainly for registration purposes for support and services.

Sylvia (2009); Peters (2010); and Dzalani and Shamsuddin (2014) studies have given a strong signal in need of studies related to clarity in conceptualising learning disorders in Malaysia. The lack of clarity in conceptualising these disorders minimises the effectiveness of special education programmes, mainly when resources are limited (Levine and Cureton 1992). Hence, it is imperative that all involved in a child's education, especially the teachers and parents have a clear, standardized understanding of Specific Learning Difficulties in Malaysia if helps are to be offered for these children.

It is assumed that the lack of clarity and 'negative' identification of dyslexia leads to 'negative' belief on people with Specific Learning Disabilities in Malaysia. From the preliminary observation and interviews with teachers in Malaysia, many teachers believe that the main contribution to academic failure among for 'non-performing students' is the students' attitude: They are lazy, playful, lack of focus and naughty. Most teachers believe that nothing much could be done to help the children [even though the children are still at a young age]. Some teachers who are given some input on Specific Learning Disability has somehow acknowledged the possibility of the children having Specific Learning Difficulty but mostly associate the criteria of Specific Learning Disability with mirror image syndrome and emphasize that those who perform slowly in academic are just slow learners and have attitude problems. Other teachers who have been interviewed, shows that she is aware of people with dyslexia but do not regard dyslexia as a problem as there are Dyslexic who manage to study at University. This finding agrees with Teoh et al. (2008), who claimed that teachers complained that parents do not regard dyslexia as a problem.

2.4.3 Overview of Special Needs Education and Dyslexia in Malaysia

Efforts in providing supports to people/pupils with dyslexia in most developing countries have started to bloom in the early 21st century. In Malaysia, through a plan called Moving Forward (2011–2020), the Malaysian Special Education Department aimed at reducing the academic gap, improving inclusiveness and multi-agency coordination within support provision as well as harnessing employability and marketability of children with disabilities. It denotes departing from past developments and venturing into new spheres with renewed strategies, towards better

educational landscapes and opportunities for children with disabilities. It is expected that by 2025, all teachers in Malaysia will be equipped with the special need education knowledge and skills.

Despite the current revision of educational acts over the past ten years, progress is considered slow. According to Pei (2015), a series of official policy endorsement had significantly garnered acknowledgment of equal educational entitlements relating to children with disability in Malaysia for over a decade; yet concrete actions remained poorly elaborated. Students with disabilities are being discriminated, and under the Education Act 1996 and the 1997 Special Education Regulations the discrimination has been further reinforced when the children's learning abilities are categorised as the educable and the uneducable; of which the latter are stigmatized as unable to manage themselves without help. It is crucial to understand that Malaysia is currently striving to achieve developed nation status. Hence, the country demands its people to keep pace with its development phase. Pei (2015) exposed that the educational policy makers in Malaysia believe that at this crucial time, the government could not wait for the incapable human capital. However, due to the global demand of equal rights in education, Malaysia has agreed to offer inclusive education to the people according to its own measure in an attempt to strike a good balance between the demand of the country's development and demand for inclusive education system.

Although the newly published 2013 Special Education Regulations has reworded the judgment of student placement based on suitability (MoE 2012), the contentious puzzle of educability remains (Pei 2015). Special needs education should focus on 'prevocational, vocational and labour training so that students can attain perfection according to their limited abilities' (Adnan and Hafiz 2001, p. 660).

Lack of awareness about learning disability and the great intellectual potential of people with dyslexia is one of the reasons for failure in identifying great talent and potential such as Einstein, Bill Gates, and Steve Jobs among the school children in many developing countries. Asian education is highly centralised (Yusof and Zakaria 2010) and exam oriented (Chong and J. Graham 2016). These resulted in many students with dyslexia to be discriminated as a lack of academic ability. Schools tend to reflect that the failure of students with dyslexia in getting good exam results as a case of students' incapability; not a case of mismatched in teaching and learning approach and learners' learning styles and preferences. This teaching approach [that ignore unique individual learning preference] has indirectly denied the capability of students with dyslexia to perform in academic.

Students with learning disabilities are broadly defined by the Malaysian Ministry of Education to include students with Down syndrome, mild autism spectrum disorders, attention deficit

hyperactive disorder, mild mental retardation and specific learning disabilities such as dyslexia (MoE 2012). According to Ghani and Ahmad (2011), there are three categories of special education needs in Malaysia: blind, deaf, and learning difficulties. Although a student with dyslexia is categorised as a student with special education need, the student learns in regular class because they are only confused with letters (Ghani and Ahmad 2011).

As students with dyslexia need help from their teachers to carry out early identification so that the specialist can make a proper diagnosis, the teachers need to not only aware of the existence of dyslexia condition but also need to be aware of the serious need for them to carry out early identification. Studies in many developing countries highlighted the opportunities for continuing professional development [CPD] as central to the needs of professionals working in the areas of special education especially in the process of identification (Ajoku-Christopher 2012; Brown and Bell 2014).

In general, most regular teachers in the Malaysian schools are still not exposed to any formal training in teaching students with special educational needs (Lee and Low 2014). The teachers' lack of knowledge in this aspect is particularly prominent in schools without special education programs (Jelas and Mohd Ali 2012; Lee and Low 2014). Bailey et al. (2015) surveyed teachers' view of inclusive education. The study recruited 300 Malaysian mainstream primary school teachers involved in the Literacy and Numeracy screening programme [LINUS]. The findings revealed that the teachers were positive towards the implementation of inclusive education. However, the teachers indicated negative perceptions about children with learning disabilities and lacked confidence in the benefits of the inclusive education system. Bailey et al. (2015) concluded that there are not many changes since the previous empirical study on Malaysian mainstream school teachers' perceptions towards inclusive education carried out by Ali et al. (2006). Hussin and Hamdan (2016) who studied the mainstream teachers' readiness and teaching techniques of inclusive practice in Malaysia claimed that lack of knowledge is the contributing factor to Malaysian mainstream school teachers' lack of readiness; lack of teaching experience is not the significant contributor.

2.4.4 Dyslexia Awareness and Teachers Professional Development

There are much to be done in teacher training so that the needs of children with dyslexia could be accommodated. There are still several unresolved issues pertaining to teacher education on dyslexia (Reid 2016). In Malaysia, mainly, there is significant progress in professional development for teachers of specialised training courses in special needs education. Nevertheless, there is a large number of non-specialist teachers i.e., all teachers in all schools untrained or lack training.

These are the teachers whose awareness of dyslexia serves as the key to eventual success in providing support to children with Dyslexia (Rose 2009).

According to Reid (2016),

“Every teacher in every classroom should have at least an awareness of dyslexia, and every school should have at least one teacher who has been on a higher-level training course in dyslexia” (preface).

Currently, efforts to train teachers to help students with dyslexia are actively implemented worldwide (Abosi and Koay 2008; Kormos and Nijakowska 2017; Srivasta et al. 2017; Kurniawati et al. 2017). However, the cost of training is considerably high. Therefore, in most developed countries, only teachers who are involved with LD are trained. Meanwhile, teachers in mainstream schools do not get formal training.

In contrast, a model for specialist training and provision for school children with dyslexia illustrates that the pyramidal hierarchy of teachers predicated on baseline expertise is all teachers in all schools [Figure 2-6]. Based on this model, the researcher believes that it is vital for all teachers to be well equipped with the core skills in identifying children at risk of Specific Learning Difficulties (<http://www.bdadyslexia.org.uk/educator/what-are-specific-learning-difficulties>); enabling early intervention to be affected.



Figure 2-6 The Pyramid of Support for School Students with Dyslexia (based on the model proposed by Rose 2009, p. 80)

The best way to spread the knowledge among non-specialist teachers at mainstream school is indeed through workshops and courses. Murray et al. (2009) revealed that professionals who had previously attended disability-related workshops and courses reported the most positive attitudes, compared to those participating in other forms of training. Finding of this study is similar to studies conducted in India by Moharana et al. (2016) and in Pakistan by Sibtain (2013).

Several factors contributing to the lack of training of basic skill in dyslexia for non-specialist teachers are time, lack of expertise, and resources as well as budgets (Norwich et al. 2010). No

matter how, if the country wishes to see all children with dyslexia and any other learning difficulties to have access to the right education and expand their real potentials; all teachers deserve to be trained with at least some basic skills because these children would not be able to demonstrate their specialties without the help from the teachers (Reid 2016).

With today's online learning development, more teachers can be trained with knowledge about dyslexia and required teaching skills. Kormos and Nijakowska (2017) investigated the effectiveness of a massive open online course (MOOC) on dyslexia towards language teachers' self-confidence, self-efficacy and attitudes towards inclusive educational practices with dyslexic students differ before and after participation in a massive open online course (MOOC). The findings revealed that the teachers' anxiety is lower; their self-efficacy and beliefs on teaching students with dyslexia increased after participating in the training.

2.4.5 Dyslexia and Literacy Intervention in Malaysia

Despite the lack of training for teachers in dyslexia support, the teachers at the mainstream schools in Malaysia were required to conduct a literacy and numeracy programme known as LINUS. Literacy and numeracy remain as the national education agenda for the primary level in Malaysia since its independence. Malaysian Ministry of Education implemented the Early Intervention Program for Writing and Reading known as KIA2M in 2006 and 3M [representing three basic academic skills – reading, writing, and arithmetic] Remedial Programme in 2008. In 2008, the Performance Management and Delivery Unit of the Ministry of Education [PADU] reported a high drop-outs rate among the youths. More than 54,000 year-one students and 110,000 year-four students had not reached the target for literacy and numeracy standard. This report leads to the introduction of the literacy and numeracy screening [LINUS] programme in the year 2010. According to Ahmad and Mutalib (2015), this remedial program was designed to ensure the competency of each student in the Malay language (Bahasa Malaysia) and arithmetic [Mathematics]. Students who failed to meet the standard will attend remedial programmes and labelled as LINUS students [LS].

The screening process is conducted through assessments conducted to year one to year three students who have not met the targeted literacy and numeracy standard. The assessments were conducted two times a year to ensure every student masters literacy and numeracy skills by year three (MoE 2010). In 2012, the Ministry of Education had requested a team of independent researchers from UNESCO to evaluate Malaysian education policy. Among the feedbacks given by the UNESCO team reported in Review (2013) were:

- i. Although MoE reports on the improvement of Malaysian academic achievement, Malaysia is ranked among the bottom achievers in PISA examination. Marginalised students represent the long-tailed- distribution of the low achievers.
- ii. Malaysia is recommended to adopt inclusive education system so that the marginalised students get equal learning opportunity.
- iii. There is a massive gap between the Malaysian education policy intent and the implementation.

In 2013, LINUS 2.0 was introduced to replace LINUS with some amendment. The English language has been inserted as an additional subject to be tested (MoE 2013). In 2016, the screening for Malay language and mathematics subjects had been reduced from two tests to one test for year one student; while English language subject remains to be tested twice a year (MoE 2016).

The government circulars on LINUS from 2010 to 2016 have stated that teachers have to ensure that all students master the literacy and numeracy according to the targeted standard except for students with learning disabilities. Students who are suspected of having learning disabilities will be screened by remedial teachers using dyslexia screening instrument. If the remedial teachers confirm the students, parents will be contacted and recommended to send their children for dyslexia screening by the psychiatrist (MoE 2010; MoE 2013; MoE 2016). The analysis of the documents also reveals that the TPD implemented to prepare teachers for LINUS focus on:

- i. Training on effective pedagogy.
- ii. Training on conducting LINUS assessment.
- iii. Training on collecting LINUS data, recording data, and using ICT system to report the data.

There is no evidence in the documents that show training on dyslexia management skills for teachers; as well as the development of multisensory types of assessment for the standardised tests for students with learning disabilities as part of the intervention for students with dyslexia. Thus, it is crucial for a TPD on dyslexia be implemented for Malaysian teachers.

Due to so much tension among the teachers, parents and Education Departments, the Malaysian new government has decided to cease the implementation of the LINUS programme since January 2019 as the government claims that it is no longer relevant. However, the screening instrument for special need education domain could be still utilised to prepare learner's individual lesson plan (MoE 2018a). LINUS was a great programme which facilitates early identification and intervention for learners with learning difficulties. Nonetheless, LINUS was introduced as a remedial program that aimed to ensure hundred percent of year three students to master the numeracy and literacy skills so that the students could follow the mainstream classes' syllabus before they begin their year four except for students with learning disabilities (MoE 2012). Although the screening

instrument for special need education domain could be still utilised to prepare learner's lesson plan, it is argued that only the remedial teachers know how to screen the learners with learning difficulties. Ironically, the remedial teachers would be able to screen the learners only when the learners were referred to them by their mainstream class teachers who are not trained to identify learning difficulties.

The researcher views the termination of LINUS programme as an indicator of Malaysian education stakeholders' confusion of the differences between the learning achievement and learning justice perceptions. An overview of studies of teachers' attitudes towards inclusive education demonstrates that "many educators have serious reservations about supporting the widespread placement of pupils with SEN in mainstream schools" (Avramidis and Norwich 2002, p. 131). In Malaysia, the debate on supports and placement of pupils with SEN in mainstream schools is built around academic achievement perspective, rarely as social justice.

In January 2019, the Ministry of Education has improved its Zero Reject Policy which was originally introduced in 1996 Education Act. The new policy made it mandatory for the mainstream schools to accept learners with special educational needs into their school (MoE 2019). Nevertheless, the learners with special educational needs are given a three-month trial to prove that they could follow the mainstream syllabus in order to be accepted into the school's inclusive education programme. In a special interview carried out in a programme hosted by the National Radio and Television Malaysia called Selamat Pagi Malaysia, the Director for Special Educational Needs of Ministry of Education, Dr. Yasmin mentioned that the three-month-trial is essential to inform the school management's decision whether the learners with a special educational need is qualified to be placed under inclusive education class, integration class [within the mainstream school] or a special need class in a school for children with special educational needs. In fact, the parents of children with special educational needs are encouraged to enrol their children into the integration education system where the children can be with other children with disabilities; and the school could screen their actual abilities to cope with the mainstream system. It is important for the parents to acknowledge Malaysian teachers' and school's readiness to implement inclusive education (Selamat Pagi Malaysia 2019). The parents were also alerted that it was difficult for the teachers to manage students with behavioural problem such as children with attention deficit hyperactivity disorder [ADHD]; and the disruptive behaviour interrupted other children's learning process. One of the speakers in a forum discussing the Zero Reject Policy at Teachers Training Institute in Perak, Mohd Anuar, highlighted that some parents insisted that their children could learn in mainstream system. The speaker cited an example of a dyslexic child who became a victim because the parents insisted the child to be in mainstream class instead of special educational needs class (IPGIPOH Q6 2019). The statement made by the Director for Special

Educational Needs of Ministry of Education and the content of the forum on Zero Reject Policy in Malaysia hosted by Teachers Training Institute in Perak portrayed the challenges in implementing inclusive education in Malaysia. It can be concluded that it is highly challenging to implement inclusive education in Malaysia because:

- a) The teachers and the schools are not ready to implement inclusive education.
- b) The integration education system is the preferred system in Malaysia. In integration class, the learners follow less challenging syllabus which focus on life-surviving skills.
- c) The segregation of the syllabus for mainstream system and integration system is the benchmark of intellectual ability. The learners with SpLD should be able to prove that they could follow the mainstream system; not for the system to prove that it could accommodate SpLD.
- d) The Zero Reject Policy is taken as a provision for parents who insisted to enrol their children in mainstream school; not for the educators to provide changes in mainstream school that accommodate the needs of children with SpLD.

The policymakers need to be selective when asking for the teachers' views on the relevance of the inclusive policy. According to Drakulich and Kirk (2016), policymakers should be concerned about the kinds of reforms which is likely to be voted if it is based on the public or the non-experts' favourite views. Therefore, Drakulich and Kirk (2016) emphasised the importance of message framing as different reform frames generate different supports for the policy reforms. According to Ganegoda and Folger (2015), framing messages that provide decision choices which are consistent with the prospect and sound framing effects would result in a higher level of perceived fairness and reduce counterfactual thinking among the receivers.

2.5 Message Frame and Framing

The study of framing has taken its place in the area of sociology since the 1950s and began to be studied in media and communication widely in 1990s (Vliegenthart and Van Zoonen 2011). Framing has ever since been studied widely in other disciplines including psychology, linguistics, management and organization, business and economics, health, media, and politics (Hallahan 1999). For instance, research on product advertising (Hirsh et al. 2012), medical campaign (Shen et al. 2015), agriculture campaign (Abrams and Meyers 2012), and green campaign (Kim and Kim 2014).

Most message frame and framing effectiveness studies are measured by the receiver's engagement with the message. One of the most adopted models is the Elaboration Likelihood Model [ELM] introduced by Petty and Cacioppo (1986). ELM interpreted that receiver's attention

depends on his or her motivation or ability to engage with the message. Changes of attitude are correlated with the receiver's level of involvement such as motivation, personal relevance, the status of knowledge, and competence regarding the message (Abrams and Meyers 2012); and other peripheral cues such as the source of credibility or use of celebrity (Shen et al. 2015). The more involved a receiver is, the more likely central processing will occur (Petty et al. 1981). One of the most frequently referenced constructs in studies of applied ELM is the argument quality. Low-involved receivers may use arguments as a peripheral cue merely noting the number of arguments and assume the message with more arguments is of higher quality (Rucker and Petty 2006).

Mak et al. (1997) proposed that the strength of the argument is a critical factor for central route messages. The appeal of persuasive attempts is likely to be effective as it matches the function underlying recipients' attitudes (Lavine and Snyder 1996). Petty and Wegener (1998) demonstrated that matched messages increased scrutiny of message content but enhanced persuasion only when the message contained strong, cogent arguments and not when it contained weak arguments. Thus, such messages are especially likely to yield counter arguing and resistance. On the other hand, matching between attitude function and message orientation does not always enhance persuasion but instead enhances careful thought about an appeal (Wood 2000).

Morgan and Cannon (2003) also found that personal and affective messages are needed to improve general attitudes towards donation - in particular, the allocation system for organ transplantation should not be biased against the African American based on races and socioeconomic status. The findings indicate that strong messages have the ability to reach targeted audiences' meta-awareness if the messages are personalised to the targeted audiences' perceive affections. Researches on persuasive message strategies highlighted that affective reaction is used for making a judgement (Albarracín and Kumkale 2003; Chia 2013). Affective reactions often trigger spontaneous likeliness or avoidance and can react as information to judgment, especially when the receiver amount of thought is moderate (Albarracín and Kumkale 2003). Due to its capacity to trigger acceptance or rejection, affective reactions play a significant role in directing the message receiver's to notify the information. The question is – how do we construct the information when we do not even notify the information? Unfortunately, according to Chia (2013), to date “little is known about what type of message or information is more effective in influencing individual emotions and perceptions in the process of information acceptance” (p.265).

Social Cognitive Theory asserts that people will be more easily influenced by events that can be remembered, which “involves the process of reconstruction rather than simply retrieval of registered events” (Bandura 2001, p.272). In framing health messages, narrative forms of communication have commonly been used because it helps to stimulate critical thinking (Kreuter et al. 2007). Most importantly, narratives often invite readers to immerse into the real experiences of others and represent emotional issues. According to Kreuter et al. (2007), there are four distinctive narrative message capabilities:

- i. Overcoming resistance;
- ii. Facilitating information processing;
- iii. Providing surrogate social connections; and
- iv. Addressing emotional and existential issues. (p.221)

With the emergence of multimedia technology, meanings of messages are depicted from different and multiple modalities such as images, animations, video, voice, music (Kress and Van Leeuwen 1996), gesture and architecture (O’Halloran 2011). According to Jones (2009), computer screen as the site of the display is different from the printed page. The screen has “unique ability to embed” several modes of messages and “create links between different sites of display” (p.116). Hence, meaning is represented by a set of inter-related systems and structures rather than by language per se (O’Halloran 2011). In fact, in multimedia communication, information tends to rely on visual images more than on text (Kress and Van Leeuwen 2001). Thus, the researcher was convinced that the understanding of meaning-making from multiple modalities gives an implication for the process of message framing in a multimedia platform.

It is evident that the study of message framing is emerging in the medical field (Kreuter et al. 2007) and advertising (Hanita et al. 2008; Hanita and Van Leeuwen 2008), little work has explored message framing for teacher professional development and barely for dyslexia awareness.

2.5.1 Message Frame

Avramidas and Norwich (2002) who review a large body of research on teachers’ acceptance of inclusion of children with special needs in mainstream school discovered that teachers’ show positive attitudes towards inclusion, but there is no evidence of acceptance of total inclusion. The teachers’ attitude was found to be strongly influenced by the disabling nature of the children presented to them. This is because individuals form justice perceptions based on cautious processing information (Ganegoda and Folger 2015). Hence, due to more exposure to disabling frames of children with special needs than exposure to teacher-related variables, mainstream teachers experience inclusion phobia (Avramidas and Norwich 2002). Policy reforms vary in their

goals. According to Drakulich and Kirk (2016), framing really matters as ‘frames for reform will be more palatable than others, but different frames may also drive support for different kinds of reforms’ (p. 174). Exposing the challenges and the nature of its support is vital to change the public (Drakulich and Kirk 2016) and the agents’ receptivity (Robinson and Goodey 2018).

There is no doubt that the stubborn resistance towards inclusive education could be destabilised by triggering the teachers’ thinking with historical context (Robinson and Goodey 2018). It was through the critical reviews of other countries’ challenges and experiences that help a country to learn and understand about how the new policy could be implemented in their countries (Lingard 2010). For instance, medical researchers and social researchers have a very long history of a dispute regarding learning difficulties, specific learning difficulties, and disabilities. Inclusive education policy was born in the middle of that crisis, and cause the education stakeholders confusions. Fortunately, recent scientific discovery supports the neurodiversity movement (Rimrodt et al. 2009) and bring synergy to both medical and social stances.

According to Matthes (2009), there are two main types of frames: the issue-specific frame and a generic frame. According to Baden (2010), the generic frame “describes a particular regularity in the selection of information for frames. They occur within many frames, which remain issue-specific as well as culturally and situationally dependent” (p.25). Among the generic frame, the conflict frame was commonly studied (Matthes 2009) that require the inclusion of at least two opposing claims or ideas (Baden 2010). Another generic frame is an episodic frame that requires a sequence of events (Baden 2010). Generally, frames are structured in certain propositions such as opposition, causal, and evaluative (Boudana 2008).

Having particular messages constructed in aimed frames will help receivers’ memory identify the contexts quickly (Baden 2010). Hence, it is crucial for TPD providers or teacher educators to know how to frame specific context so that the learners’ knowledge and belief acquisition (Baden 2010) process is facilitated - not confused. According to Bandura (2001), people will be more easily influenced by events that can be remembered, which “involves the process of reconstruction rather than simply retrieval of registered events” (p.272).

Matthes (2009) analysis of 131 message framing studies published in fifteen international journals revealed that the most significant cluster of frames analysed (n = 80) is text-based, followed by (n = 33) data – based. Nevertheless, with the multiple modes of communication offered via multimedia communication, the meaning of messages can be interpreted more than textual interpretation (Kress and Van Leeuwen 2001). Geise and Baden (2015) assert that frames utilise “different kind of devices capable of signifying interpretable information” such as text, yet the study of frames and framing that connect to different modalities of communication is not

currently carried out (p.3). The researcher strongly believes that in the era of e-communication and online learning, module developers, providers, and educators need to utilise different modalities of communication to deliver their messages or content. Hence, the study of message framing incorporating multimodal communication devices is imperative nowadays.

Potter (2013) claimed that multimedia messages enhance people's understanding, control and appreciation as people can see much more in a given message, by taking charge of their mental activity while interpreting the message, and thus appreciate what they see in the message. While interpreting the messages, people undergo the sense-making process (Weick et al. 2005).

According to Weick et al. (2005), messages that make sense answer two fundamental questions – “what's the story here?” and “now what I should do” (p.410). Roberts (2013) who conducted a 3-year experiment on student academic engagement found that suitable visual images triggered active learning behaviour. As an example, one of Robert's respondents claimed that she had heard of the term desertification earlier but could not be bothered to find out more about the term. However, after viewing a picture of the London Bridge in a desert, the respondent became interested to find out the causes of it. Igartua et al. (2003) analysed the less experienced audiences' affective and cognitive processes when viewing short films on Aids prevention. Their findings revealed that the use of short films with an “unexpected content that is discrepant with the cultural expectations” (p.514) stimulate negative affectivity and prompted cognitive processing. It is an efficient way to induce the audience's decision whether or not to think further about the message.

The multimodal nature of the internet can be categorised to two (super) modes: the visual and the auditory. However, according to Pauwels (2012), there are diverse aspects of visual and auditory modes. The visual mode includes ‘the textual parts (have to be viewed or heard), typography, layout, and design features. Likewise, the auditory mode includes (spoken or sung texts, music, noises)’ (p.250). Therefore, in the study of message framing for dyslexia TPD, the researcher includes the analysis of the visual and the audio devices of the message.

2.5.2 Message Framing

According to Hallahan (1999) ‘framing operates by providing contextual cues that guide decision making and inferences by message audiences’ (p.208). A review of 131 message framing studies published from 1990 to 2005 by Matthes (2009) shows that there was lack of studies on message framing hypothetical testing. Nonetheless, the review of literature in recent years indicates that empirical research on message framing is gaining its momentum. An extensive body of research was carried out to study the effectiveness of message framing by comparing audience's responses

towards the message framed as perceived gains and perceived loss (Lee et al. 2008; Kim and Kim 2014) as well as perceived fear (Wilson et al. 1988). In general, receivers tend to be affected by loss frames when it is associated with risk perception, and gain frames when it is associated with neutral perception (Rothman and Salovey 1997; Edwards et al. 2001). Studies on message framing in health education discipline has vastly utilise gain, loss and risk frame as well as valence.

According to Ferguson and Gallagher (2007), people respond differently towards positive and negative information. The positive and negative valence of message has also been use to study message framing in guiding judgment (Maheswaran and Meyers-Levy 1990; Homer and Yoon 1992; Roy and Roy 2017). For examples, the study of brand attitude judgement (Shiv et. al. 2004), politics (Van Klinger et. al. 2017) and antismoking campaign (Mollen et. al. 2017). Positive and negative valence of the messages are important as they deal with emotions that trigger set of responses which direct the receivers' attentions to the problems or the opportunities (Lerner and Keltner 2000).

Another strategy is to frame the messages that is congruent to receiver's everyday living situations. Messages that match with the receiver's everyday-living orientation easily retrieved and processed compared to incongruent messages (Aaker and Lee 2001). As an instance, Morgan and Cannon (2003) who studied attitudes and behavioural norms of African American on organ donation, found that willingness to donate is strongly affected by lack of knowledge as well as belief in myths and misconceptions about organ donation. Hence, it is strongly suggested that message strategies emphasise on the type of lacking knowledge precisely than random raising awareness messages. Morgan and Cannon have raised a good point here. Spreading messages of awareness without knowing what the receivers need to be aware of, is an effort that the researcher considered as ineffectual. It is the researcher's contention that awareness could be a matter of 'not knowing' due to lack of knowledge; or a matter of 'not understanding' due to lack of clarification. Hence, the prior to spreading awareness messages, the message provider should identify the awareness status of the recipients. Identified recipients' awareness status would enable the message provider to frame messages that match the receivers' current experiences and concerns. According to Tykocinski et al. (1994) messages that are framed to match people's current experiences and concerns can elicit distress by identifying seemingly relevant goals that have not been adopted.

Hallahan (1999) listed out the common typology of framing as follows:

- i. Choices – Framing messages based on perceived gain, perceived loss and perceived risk.
- ii. Actions – Framing messages influenced by positive or negative valence of messages.

- iii. Situations – Framing messages in view of the relationships between the individuals and everyday living situations.
- iv. Attributes – Framing messages in terms of focal attributes or bias to certain attributes and ignore others.
- v. Issues – framing messages in preferred definitions of a problem or situation.
- vi. Responsibility – Framing messages in view of receiver's personal roles or self-image.
- vii. News – Framing messages with familiar and culturally resonating themes.

The analysis of message framing normally utilise single frame and framing variables; some utilise two or the most three variables (Hallahan 1999; Baden 2010; Geise and Baden 2015). From the review of literature on message framing study, the researcher noticed that the majority of the study of framing were conducted via document analysis. Hence, analysing the most three framing variables would be ideal and manageable.

2.5.3 Teachers as Adult Learners

There are significant learning differences between adult and children (Knowles et al. 2014). Not like children who wander around their learning environment, adult enters into their learning environment deliberately and purposefully – that is central to critical theory. Adult learners learned with the help of prior knowledge gained throughout their life and enhanced their knowledge with experiences. Experience is not defined by the number of years but by the numbers of challenges that one encounter and numbers of efforts made to find the solution by assimilating their experience in a social context.

As adult learners are senior members of the community, their thinking is shaped by dominating ideologies collected via their growing experiences. It is imperative to understand that adult learning is a social as well as political process (Brookfield 2012) that highly depending on how adults learn to reorganize the information. Research in adult education disciplines emphasizes that adult lifelong learning setting takes place not only in the individual itself but also in the community. Brookfield (1984) claimed that adult education transactions are facilitated by various resources and not purely incidental.

Mezirow (1990) claims that adult makes learning meaningful by interpreting their sense of experience which guide them to action or decision-making. The interpretations are reflected within two cognitive dimensions: Meaning schemes (governed by event sequences and category relationships) and meaning perspectives (assimilating arguments). Novak (2002) propose that the ultimatum of meaningful learning rise from the lower level of Bloom's thinking taxonomy to its

highest level. Learning will be meaningful when it reaches the meta-cognitive level. Novak (2002) has also mentioned about the relation to affection. However, it was not extensively elaborated as cognitive elaboration. Dirkx (2001) argue that adults' meaningful learning is shaped by its central role of emotions that is "imaginative and extra-rational, rather than merely reflective and rational" (p.64). He further claims that emotions charged images that are reflected in a particular sociocultural and psychic context. When the person is engaged cognitively and emotionally, they will undergo a deep conversion (Brookfield 2012) that transform the individual to fundamentally different ideology. An empirical study by Chick et al. (2009) indicates that when students are engaged in metacognitive and meta-affective activities, the students' awareness and understanding of the subject increases. When examining how students think and feel about their learning, Chick et al. (2009) found that emotional recognition leads to the learners' attention and caused learners to explore more. When students explore new knowledge, the rethinking process occurs and causes the students to be aware of their learning.

Being aware of one's own learning or understanding is called metacognition (Imel 2002). There are various studies on metacognition found in education. Unfortunately, studies on meta-affective have not given much emphasis on education as compared to metacognition. Even though research has described the roles of metacognition and meta-affective separately, studies have found that meta-cognition and meta-affective works in interweaving manners to enhance learners' understanding (Albarracín and Kumkale 2003; Picard et al. 2004; Chick et al. 2009). Picard et al. (2004) redress the imbalance of emphasis on cognitive presence and affective presence in the theories of technology in which they claimed affective presence tend to be marginalised. In their reviews, Picard et al. (2004) discovered how to foster a love of learning by trying to create mathematics that people love to learn [instead of trying to make people love to learn mathematics that they hate] using digital technology. They found that affective presence complexly intertwined with cognitive presence create a path that guides rational behaviour, memory retrieval, decision-making, creativity, and more. They claim that affective presence has not merely energised learning but is affective as it establishes the rapport and enhances the relationship with the learners. For example, dramatic graphics and dynamic colourful animations produce dominant effects on learners. In another instance, in an online learning environment, learners take control of their learning, unlike the traditional face-to-face environment, the learner is, most of the time, under-controlled. The sense of 'taking charge' influence on how 'learning grows and connects' (Picard et al. 2004, p.262).

It can be concluded that both affective and cognitive reflections produce learning awareness. The kind of awareness that occurs during the interweaving process of cognitive and affective has not

been named. Hence, to help the researcher explore the interweaving process involved in studying the response on message framing, the researcher calls the awareness phenomena that increase the level of awareness and understanding as an effect of the combination of cognitive and affective reactions as 'meta-awareness.' The term meta-awareness has been utilised in mostly the study of psychology and brain science (Schooler et al. 2011; Mooneyham and Schooler 2013). Nonetheless, the term meta-awareness in such study is derived from meta-cognition. The researcher argues that meta-awareness is more than meta-cognition. As Mooneyham and Schooler (2013) highlighted, meta-awareness is related to mind-wandering mental activities; and mind-wandering is related to mood (Killingsworth and Gilbert 2010) or emotion. Since the use of the term meta-awareness and meta-cognition is used interchangeably in psychology and brain science discipline; and since many research tend to marginalise affective awareness (Picard et al. 2004), the researcher proposes that the term meta-awareness to be used to define the interweaving relation of cognition and affect that raise awareness.

In contrast to the usage of the term meta-awareness [equivalent to metacognition] in the study of psychology and brain science, in this study meta-awareness is the term used to explain the phenomena that occur when metacognition and meta-affective are linked. The reason for naming the interweaving phenomena is that in framing a message, it is essential that the researcher study how certain artefacts [framed in specific ways] affect human's metacognition; meta-affective; and both [meta-awareness]. This is because, when one knows about a specific thing or situation, it is not necessarily that one can feel about the thing or situation. By studying the framing effect of the artefacts to human's meta-awareness, the researcher will be able to interpret how metacognition and meta-affective work as a team to raise the combination type of awareness. The illustration of cognitive awareness and affective awareness concerning the proposed usage of the term meta-awareness [for this study] is presented in figure 2-7.

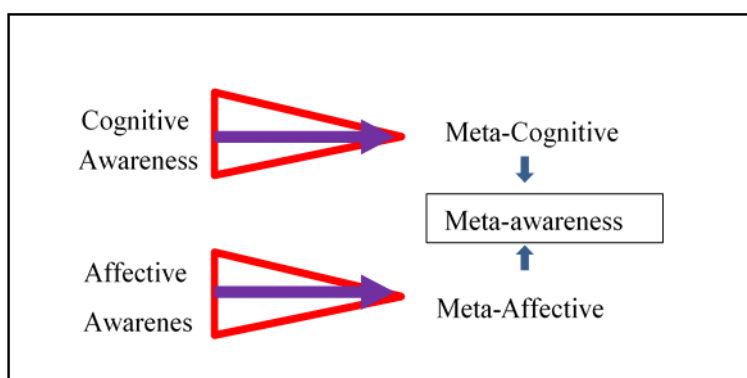


Figure 2-7 Cognitive Awareness and Affective Awareness in Relation to Meta-Awareness

- **Cognitive awareness** – being aware of the existence of a knowledge or acknowledge something (knowing-what).

- **Meta- cognition** – being more aware of about the existence of a knowledge (knowing-why; knowing-how; knowing-when).
- **Affective awareness** – being aware about one’s feeling for a knowledge or acknowledge one’s feeling (knowing-what I feel).
- **Meta-affective** – being strongly aware of one’s feeling for something (knowing-why I feel; knowing-how much I feel; knowing-when I feel).
- **Meta awareness** – know and feel about a knowledge.

Relating teachers’ experience to Mezirow (1990), Brookfield (2012), Novak (2002) and Dirkx (2001) theories of meaningful learning, it is anticipated that in order to make learning meaningful for teachers, the methodology for TPD should consider the affective implications of the training to teachers too. Like cognition, affection runs from lower level to higher level. The higher the training reaches the affectivity level of the teachers, the more the teachers will be aware of the situations and prompted to take action.

2.6 Overview of the Literature

A thorough exploration of the literature suggests that there is lack of understanding of the concepts of inclusive education and dyslexia as a movement for social justice in Malaysia. The inclusive education policy in Malaysia is predominantly viewed as a plan that help to contribute to raise the national academic achievements. Failure to understand the ‘why- is the change for inclusive education’ among the teachers and policy makers in Malaysia will compromise the success of its inclusive education implementation. The inclusion process in Malaysia has by and large focused on students with physical disabilities (Muhamad Nadhir and Alfa Nur Aini, 2017); students with severe learning disabilities, which are easily detected; and students with different talents (PADU MoE 2017). While funds and resources are substantially allocated for addressing the needs of these group of students, the learning needs of dyslexic learners by implication have been left alienated and neglected. In short, the problems faced by these dyslexic students are further elevated to a more serious level of concern. Having said that, it is felt that there is a significant need to raise the Malaysian’s awareness of the risk of neglecting students with dyslexia during the inclusive policy reform period, and by way of extension, of other nations with similarly low awareness.

Worldwide, education system has evolved from segregation to integration and currently to inclusion where appropriate supports and accommodations for learners with special needs especially dyslexia could be provided within the mainstream classroom (Reid 2019). Teachers are seen as the key agents for inclusive education. The success of transforming the education system from exclusive to inclusive education depends on the teachers’ beliefs ‘about nature of disability’

and about the teachers' overall effective teaching skills 'for all students, both with or without special education needs' (Jordan et. al. 2009, p.535).

History has shown that when there is a policy reform, it is imperative that the policy makers extensively study the proposed policy; and the teachers are prepared to deliver the change in their classrooms. Because teachers are the primary agent of reform, their beliefs are fundamental to the success of any implementation of reform. That being said, it is critical that the teachers' beliefs be transformed. The transformation takes some times. Hence, policy makers need to know when the teachers are ready for the change. Once the teachers are ready, a transmissive TPD can take place where pedagogical knowledge is transferred to the teachers. In the context of dyslexia, the training should first begin with the transformative TPD that focuses on awareness and conception establishment before the transmissive TPD that focuses on identifying skills and intervention.

In order to conduct TPD to all teachers, a considerable amount of money, times, and efforts are required. Therefore, an online TPD could be opted as an affordance for such goal. Among the challenges in producing online learning resources that aim at raising awareness is to determine useful asynchronous messages that strike the teachers' attention at first sight.

It is imperative to note that the review of literature mentioned in this chapter shows that the TPD for such affordances should be transformational in nature. There are evidences that teachers' understanding about dyslexia has also been influenced by neuro-myths (Howard- Jones 2014; Zadina 2015). The misconception leads to risk for the learners without certain symptoms of being unidentified, and later denied of necessary supports and accommodation. Hence, by framing the dyslexia awareness messages via neurodiversity model, the problems with neuro-myths could be reduced. Neurodiversity model acknowledges the brain's impairment, yet, promote the dyslexic's strengths to be utilised and weaknesses to be accommodated. Furthermore, the neurodiversity movement encouraged people to perceive labels as positive. Likewise, Jordan et. al (2009) pointed out that label is essential to inform about the nature of particular disability. Elliot and Grigorenko (2014) argued that the unspecified symptoms of dyslexia bring about opportunistic behaviour among people who seek for more time accommodation and ICT facilities. However, Norwich (2007) contended that the issue related to dyslexia and inclusion should be viewed from a dilemmatic perspective. A dilemmatic analysis of an issue involves a choice between two or more alternatives which are unfavourable. The decision-making requires balancing the needs of the individuals and the needs of the majority as well as the needs of the organizations (such as the government's national agenda). It is argued, the dilemma should be analysed from the issue of rights and social justice (Gewirtz, 2002). The neurodiversity model (Graby 2015) together with

dilemmatic analysis of issues related to dyslexia and inclusion (Norwich 2007) provides a balance between the extreme concepts (social constructions) of distress and disability.

In the case of Malaysia, the government is striving to achieve developed nation status and meet the demand of equal rights in education. For this reason, the Ministry of Education has drawn a policy which specifies that all learners with special educational needs are given a grace period of three months to be learning in the mainstream education system and should they fail to adapt, are recommended to return to the integration education system (Selamat Pagi Malaysia 2019; IPGIPOH Q6 2019). The current study of the triggering message framing on dyslexia awareness is important. The findings could provide some insights into the design of related teacher professional development. It is hoped that the accurate framing would foster a better, deeper understanding of dyslexia among the educators and becomes a catalyst in expediting the process of the implementation of inclusive education in Malaysia.

Chapter 3: Research Methodology

This interpretive study is divided into two phases. The first phase is the understanding of the participants' dyslexia awareness (pre-message framing phase), and the second phase is the understanding of the framing of the dyslexia awareness messages as part of the affordances to encourage the participants to learn about dyslexia conception and support (message framing phase).

It is crucial to conduct a preliminary study to understand the Malaysian teachers' current knowledge about dyslexia to ensure the accuracy of the selected materials for the message framing phase. This lead to the first research question of the study: What is the awareness level of Malaysian primary school teachers on dyslexia? The interpretation of the participants' awareness and possible knowledge gap facilitates the selection of artefacts to be used in the online teacher professional development for dyslexia. In the second phase, the participants were asked to reflect on three selected artefacts. The participants' reflections were analysed to gain a better understanding of which messages about dyslexia that triggered the participants' learning about dyslexia. Then the frames and framing of the triggered messages were analysed.

The second phase of the study attempts to answer the second and the third research questions of the study: [i] which message/messages triggered the participants to learn about dyslexia? [ii] How the messages are framed to trigger the participants' learning? The analysis of the message framing was then triangulated with the participants' reflection for a better understanding of how the online messages about dyslexia could be framed to trigger the participants' learning inquiry. The research data were analysed qualitatively using the inductive approach and deductive approach.

This chapter clarifies the paradigm, the positionality, the approach, the design, the context, the participants, and the ethics of the study.

3.1 Research Paradigm

This study of message framing in designing online courses for teacher professional development lies within the interpretive paradigm. In an attempt to make sense of which messages were able to trigger the participants to learn more about dyslexia, and how the triggering messages were framed to produce such framing effects - the study was designed through the lens of the participants' view of the situation.

The ontology of interpretive study views reality as internally constructed through the human mind and socially constructed meanings (Ritchie et al. 2013). Hence, the interpretive learning paradigm emphasises the process of constructing meaningful representations (Murphy 1997) built upon the "participants' views of the situation being studied" (Creswell 2003, p.8). These views contain multiple realities as people construct the meaning and understanding of information surrounding them differently – Those constructions depend on how new and previous knowledge is reconciled with the individual's established beliefs; how their beliefs are reconstructed; and how their experiences are reflected in those constructions. Although personal data gained from this approach cannot be generalised, interpretive methodology accommodates the researcher with the multifaceted perspectives and versions of truth of the studied issue.

It is contended that the interpretive approach is best suited the aims of the study – to gain a better understanding on how the framing of the messages in the selected artefacts trigger the Malaysian teachers to learn about dyslexia conception and support. Willis and Jost (2007) stated that "different people and different groups have different perceptions of the world" (p.194). Hence the findings will help enlighten and bring useful insights for the development of an oTPD course for dyslexia that is suitable for the Malaysian context.

This study can be recognised as the interpretive work based on the following characteristics of interpretive research intention as listed by MacKenzie and Knipe (2005):

- a. Interpretivist approaches to research have the intention of understanding "the world of human experience" (Cohen and Manion 1994, p 36). The purpose of the study is to understand how messages about dyslexia were framed to trigger the Malaysian teachers to learn about dyslexia conception and supports. The understanding was established by analysing the teachers' experiences while interacting with the messages which were demonstrated via the teachers' reflections.
- b. The interpretive researcher tends to rely upon the "participants' views of the situation being studied" (Creswell, 2003, p.8) and recognises the impact on the research of their background and experiences. The findings of the study rely on the participants' responses during the interviews; their reflections on the triggering messages; and the analysis of the frame and framing of the content of the messages, and the techniques applied.
- c. The interpretive researcher "generate or inductively develop a theory or pattern of meanings" (Creswell, 2003, p.9) throughout the research process. The frames and framing of the triggering messages were analysed together with the participants' reflection to generate the pattern of the meanings.

3.2 Research Positionality

In this section, the researcher refers herself with personal pronoun 'I' to indicate the personalisation.

The journey to my Ph.D. is driven by both professional and personal pursuits. As an academic staff in a public university in Malaysia, I undertake Ph.D. as a form of extensive training for research as a skill; and indirectly, contributing empirical findings for national agenda. As a parent of a dyslexic child, the hardship that my daughter went through to get support from school has driven me to explore more about dyslexia and how the Malaysian education system can be supported.

In positioning myself as a researcher, I started to ask myself questions that Jankie (2004) had listed:

- i. Who am I in the eyes of the participants?
- ii. Am I part of the participants?
- iii. Am I an outsider?

Most importantly, I start this research by questioning the reasons why I chose to do this research.

First and foremost, I acknowledge that my personal experience is the primary motivation for doing this research. The reasons behind it are embedded in the feeling of empathy I have developed for the dyslexic children who are often misunderstood and emotionally harmed by parents, teachers, and society inadvertently. Several months after learning about dyslexia, I admitted the mistakes I made as an ignorant parent. I realise how much pain I have caused to my child, and I also learned that many other children are currently suffering because of adults' lack of knowledge about dyslexia. I have also discovered that the Malaysian Ministry of Education (MoE) has introduced the inclusive education system and has implemented several mechanisms in overcoming problems with literacy. Nonetheless, much is to be done to raise the awareness of dyslexia into Malaysian society so that responsible adults to the unidentified dyslexic children (such as parents and teachers) could provide the best support for their children and students. Hence, by understanding how teachers learn about dyslexia via particular message framings (that trigger teachers to discover more about dyslexia), it is hoped that the efforts to implement inclusive education and to provide justice to marginalised students especially dyslexic children will be more meaningful.

Researching in a setting that is not the 'fieldwork' of the researcher is challenging as it "affects the process of gaining access to, establishing, and maintaining rapport with respondents" (Gurney 1985, p.42). The participants will most likely see me as an outsider for many reasons. First, I work at a University - a different institution from schools they work in; which are governed by different ministries. Being a parent, I hold another outsider position – an adjacent stakeholder who might

be demanding for their services. My positions as both, an academic in higher education institute and a parent, has made me an outsider that the teachers would consider to treat with caution. Building a rapport with my participants is extremely crucial. Otherwise, I would not be able to get sufficient data that are hidden in the teachers' minds and emotions.

It is also crucial for me to acknowledge the potential biases that I may have towards the participants due to previous bad experience dealing with teachers and schools in Malaysia to get support for my daughter. My position as an outsider, at this point, could be an advantage that enables me to put myself on the ground. As an outsider who does not work with the system, I realise that my knowledge about what is happening in schools is little. Hence, I am not in a position to judge and criticise them. I should enter the research settings without any prejudice.

3.3 Inductive and Deductive Approach

The interpretive research is predominated by qualitative methods (MacKenzie and Knipe 2006) because the primary purpose of interpretive research is to understand human experience. Qualitative methods offer the interpretive researchers opportunities to gain some insights and in-depth information. From the data gathered, interpretive researchers draw up patterns of meaning inductively to generate their interpretation (Creswell 2003). For decades, the inductive approach has been criticised and debated. However, several strategies were developed to address the issues raised. Among the issue raised was that "qualitative researchers tend to prioritize logic emerging from experience" than using a theoretically based framework (Bendassolli 2013, p.2). Succeeding his analysis on the problems related to induction approach, Bendassolli (2013) claimed that generally, most qualitative researchers utilise a hybrid method because the theory-building process involved both data induction and deduction. It is because qualitative and quantitative methods complement each other (Creswell 2003; MacKenzie and Knipe 2006).

In this study, the researcher seeks to understand the data beyond the single fact that lies in the framing of messages that trigger the participants to learn about dyslexia conception and dyslexia support. The inductive approach allows the researcher to explore multiple facts revealed by the data in the study. Nonetheless, as a novice qualitative researcher, the researcher needs a good guide during the qualitative research process, which is available from the established frameworks built by the experts in the field studied. The justifications for the selection of a hybrid approach for this study were related to the process of analysing qualitative data which has been best described by Bendassolli (2013) as follows:

- i. The researchers established initial contact with data during general reading and followed by focussed reading. During the process, notes were taken to help the researchers

analyse the data at the later stage. Specific themes were expected to reveal from the initial analysis inductively.

- ii. Another alternative in attempting to discover themes is by deductively analyse the data according to an existing framework. “When creating the codebooks for qualitative analysis, the researchers can be both inductive [allowing themes to emerge from the data] and deductive [relying on previous analytical categories obtained from selected theoretical framework].” (p.8)
- iii. “The coding procedure is complemented by categorisation and conceptualisation. It is a process of growing abstraction... The process should allow researchers to develop a theory that is not a simple synthesis of observational statements—that is, a description in a broad sense. Researchers must go beyond induction, and it is at this point that conciliation problems emerge between empiricism and the criteria demanded of a formal scientific explanation.” (p.9)

Furthermore, the hybrid approach provides empirical boundaries expansion, which allows ‘potential discoveries of new interdependencies’ (Dubois and Gadde 2002, p.557).

As mentioned earlier, this study comprised of two phases: the pre-message framing phase [preliminary phase] and the message framing phase [main phase]. The data in the pre-message framing phase were analysed fully inductively, whereas the data for the message framing phase were analysed using the inductive and deductive hybrid approach.

The study adopted an inductive and deductive hybrid approach data analysis. Refer to appendix B for the flowchart further illustration of the process. The initial themes for the pre-message framing phase were conceptualised from the review of literature about Malaysian teachers’ dyslexia awareness. The review of literatures revealed that Malaysian teachers have limited knowledge of dyslexia (Dzalani and Shamsuddin 2014); few selected teachers were trained as facilitators for LINUS (literacy and numeracy screening); and the facilitators received a training on general special need knowledge (MoE 2012). Since the teachers’ knowledge about dyslexia is limited, the researcher decided to conduct a preliminary -message -framing study to understand the teachers’ background knowledge about dyslexia. The pre-message framing findings helped the researcher to determine the criteria of the artefacts to be utilised for the current message framing study. During the observations of the teachers’ Facebook discussions, the following questions were set as guidelines:

- i) What do the teachers reveal that they know about dyslexia?
- ii) What do the teachers reveal that they do not know about dyslexia?

From those observations of the teachers' discussions in Facebook, the researcher discovered that the teachers have some knowledge of dyslexia but they also have some misconceptions. Thus, 'misconception' has been identified as an additional emerging theme which was inductively derived from the observation. The three themes were then set as the coding for the in-depth individual interview data analysis. The themes emerged from the interviews with the individual participants were utilised to inform the researcher of the selection criteria of the artefacts to be utilised for the study of message framing.

The main data for the study were collected from the message framing phase which was divided into two parts: Part 1 - the identification of the triggering messages; and part 2- the story framing of the selected artefacts and the triggering messages. In the first part of the message framing phase, the themes were discovered from the emerging data from the individual participants' reflections on the messages promoted by each artefact viewed. The themes for the triggering messages were categorised and conceptualised based on the participants' recognising, recalling, and reflecting particular scenes, characters, or issues presented in the artefacts. In order to confirm the triggering messages identified, the researcher carried out further analysis to check whether or not the process of learning has occurred. This is because, according to Garrison *et al.* (2001), when the learners were triggered, they will continue to explore the new information; integrate the new knowledge with the old knowledge, and settle with a resolution. Therefore, to deduct the data related to the participants' process of learning, the study adopts four events or stages of learning process defined in the online learning inquiry framework by Garrison *et al.* (2001) as the codebook. In the second part of the message framing phase, the code manuals for the key themes of the messages were formulated from the researcher's prior analysis of the dyslexia awareness campaign by two distinguish dyslexia associations [BDA and IDA]. The code manuals for the frames and framing analysis were adopted from Hallahan's models of framing analysis applicable to public relations. The application of the hybrid inductive and deductive analysis approach in the study is explained further in 3.5.2 for the pre-message framing phase and 3.6.2 for the message framing phase.

3.4 Research Design

The pre-message framing phase is the preliminary phase of the study. The aim of conducting the pre-message framing phase is to understand the current level of dyslexia awareness among Malaysian teachers. The term dyslexia awareness used in the study include these particular notions - beliefs, knowledge, and experience. The message framing phase is the main phase of the study. The message framing phase is divided into two parts, which addressed two different research objectives:

- a. Part 1 – to identify the triggering messages.
- b. Part 2 - to understand how the triggering messages were framed.

The research objectives were represented by the following research questions:

- i. What is the level of dyslexia awareness among Malaysian primary school teachers?
 - a. What does the awareness level suggest about the messages to be forwarded in the study?
- ii. Which message/messages triggered the teachers to learn about dyslexia?
 - a. Do the triggering messages promote exploring events, integrating events, and resolution events?
 - b. What are the implications of the triggering message/ messages on the teachers' learning about dyslexia support [identification and intervention]?
- iii. How are the messages framed to trigger the participants' learning?

The first research question was determined from the review of previous literature on the Malaysian teachers' awareness on issues of dyslexia; the conception and perception of the national literacy and numeracy screening programme [LINUS]; and the evolution of education policy in Malaysia [inductive]. The review of previous literature indicates that the Malaysian primary school teachers have limited awareness of issues related to dyslexia. Nonetheless, the detail information on the teachers' knowledge gap about dyslexia is scarcely available. Without the information on the teachers' background knowledge of dyslexia, the criteria for the artefacts to be utilised in the message framing study could not be determined. Thus, there was a need to conduct a pre-message framing study which aims to understand the level of dyslexia awareness among Malaysian primary school teachers.

The message framing phase was led by the second research question which aims at identifying the messages that trigger the participants' learning about dyslexia conception and supports, and the third research question that aims at understanding how the messages are framed to trigger the participants' learning. The objectives, research questions, and the methodology of each phase are presented in table 3-1.

Table 3-1 Objectives and the Methodology of Each Phase of the Study.

Study Phases	Objectives	Data Collection Method
Pre- message framing	To identify the teachers' dyslexia awareness gap (the current knowledge and the knowledge ready to acquire) RQ 1: What is the level of dyslexia awareness among Malaysian primary school teachers?	<ul style="list-style-type: none"> • Social media group discussion observation • Instant messaging interviews

Message framing	a. Triggering messages	<ul style="list-style-type: none"> • Teachers' reflection • Instant messaging interview
	<p>To identify the triggering messages from the artefacts.</p> <p>To understand the implications of the triggering message/ messages on the teachers' learning about dyslexia supports [identification and intervention].</p> <p>RQ 2: Which message/messages triggered the teachers to learn about dyslexia?</p>	
	b. Message Framing	<ul style="list-style-type: none"> • Content and narrative techniques framing analysis of the artefacts
	<p>To understand how the messages on dyslexia are framed within the artefacts.</p> <p>RQ 3: How are the messages framed to trigger the teachers' learning?</p>	

The data for the pre-message framing phase were collected from two Facebook closed group discussions hosted by two research assistants. The research assistants are primary school teachers who have an established rapport with the participants. From the observation of the Facebook closed group discussions, the researcher gain an understanding of the main issues lingered around the primary teachers' dyslexia conception and dilemma in providing dyslexia supports. Follow up interviews were conducted to the nine recruited participants to enhance the researcher understanding of the emerging themes. Addition of six participants were recommended to the researcher by words of mouth. In total, there were fifteen participants involved in the in-depth individual interview for pre-message framing phase. The same participants continued to take part in the message framing phase. The data from both, the Facebook closed group discussions and in-depth individual interviews gave the insights into the participants' current knowledge and knowledge that the participants have not yet acquired but ready to acquire (Krashen, 1992). This concept is drawn from Krashen's Input hypothesis that illustrates the zone of proximal development. Krashen's Input hypothesis is utilised mainly in second language acquisition theories. However, the specific mark that he pointed on current knowledge [symbolised as *i*] and knowledge that has not yet been acquired but ready to be acquired acquire [symbolised as *+1*] help the researcher to visualise the teachers' [as learners of the oTPD] current knowledge about dyslexia [*i*] and the next level of knowledge about dyslexia to be introduced to the teachers [*+1*]. The symbol *+1* emphasises that learners [the participants] learn an input that is one level above their prior knowledge. If the input is far above the current knowledge, the learners will get confused as there is a gap that hinders learning comprehension. Hence, it is vital for any oTPD developers to identify the learning materials that best suited the target learners. Findings from

the pre-message framing study [refer to chapter 4] provide an insight of which input is comprehensible to scaffold the teachers' conceptual understanding of dyslexia so that the teachers could support dyslexic students in the mainstream school as Malaysia has begun to implement inclusive education system (Jelas and Mohd Ali 2012; Chong and J. Graham 2016).

In the second phase of this study, the researcher studied the participants' reflections on the messages framed in the selected artefacts. The triggering messages were identified from the participants' recall, recognition, and reflection on their thinking and feeling about scenes, characters, and issues from the artefacts viewed. To ensure that the messages identified have triggered the participants to learn about dyslexia, the researcher utilised the four [online] learning inquiry process adopted from Garrison *et al.* (2001) model of practical inquiry. It is claimed that effective message leads the participants to (1) become aware of a problem [triggered]; (2) explore its salient aspects [explore]; (3) integrate old and new knowledge and interpretations [integrate], and (4) resolve the initial dilemma [resolution]. The four phases represent the transition process that online courses could provide (Vivitsou *et al.* 2008).

The findings shed insight for the future communication design and development of online professional development for dyslexia awareness in Malaysia, particularly, and other countries with a similar background. The research design is illustrated in Figure 3-1 below.

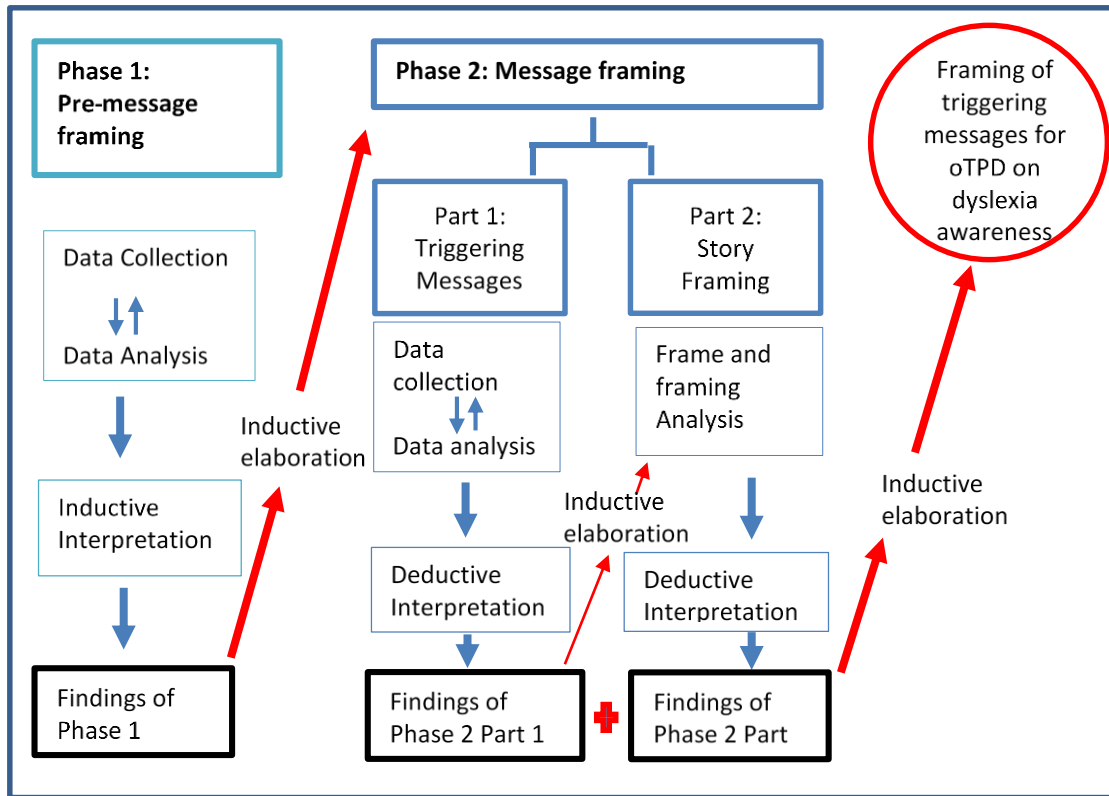


Figure 3-1 Research Design

The description of the research design is as follows:

a. Phase 1: Pre-message framing

- The pre-message framing phase objective: To identify Malaysian primary school teachers' awareness level. Findings of the study suggest the participants' zone of proximal development on knowledge about dyslexia and provide the information for the content of message framing in phase 2.
- The data collection: The data were collected in two stages [i] the observations of two groups of teachers' discussion on social media; and [ii] in-depth interviews of a total of fifteen teachers. The purpose of observing the teachers' discussion in two groups of social media is to understand the teachers' conception about dyslexia and to identify the potential candidates for recruitment.
- The data analysis: The data were analysed qualitatively, interpret, and organised into themes which form the patterns of the participants' dyslexia awareness and specific knowledge gap.
- The findings of pre-message framing study provide information on the selection of artefacts to be used in message framing study [the main study].

b. Phase 2: Message framing

- The message framing phase objectives: The first part of the message framing phase aims at identifying the triggering messages by understanding the participants' learning process: triggering, exploring, integrating and resolution; and understanding the implications of the triggering message/ messages on the teachers' learning about dyslexia conception and supports [identification and intervention]. The second part of the message framing phase aims at understanding the framing (content and narrative) of the dyslexia awareness messages utilised in the triggering messages reflected by the participants.
- Part 1: Data for the identification of the triggering messages were derived from the participants' reflection of artefacts viewed. Three artefacts [V1, V2, and V3] were selected based on the findings from the pre-message framing study. The participants viewed and reflected on each artefact. The participants' cognitive and emotional responses were recorded as they recall, recognise, and reflect on certain scenes, characters, and issues from the artefacts. During the interviews, the researcher only asked two common questions:
 - i. What did you think when you watch V1, V2, and V3?
 - ii. How do you feel watching V1, V2, and V3?

The purpose of asking the participants to recall, recognise and reflect on their thinking and feeling about scenes, characters and issues from the artefacts is to identify the messages that trigger the participants to learn further about dyslexia. The data were collected and analysed concurrently.

- Part 2: The framing of the story of each artefact was analysed to identify the frames of the artefacts. The two important aspects of the story framing proposed by Hallahan (1999) were utilised as the codebook for the frame and framing analysis in the study - namely the key themes and the narrative techniques. Three key themes related to online training for dyslexia awareness were identified prior to the message framing analysis. The artefacts' scripts were analysed to understand the story content so that the key frames of the artefacts could be determined. However, only the narrative techniques of the triggering messages were studied because, as mentioned in the introductory chapter, the triggering aspects of messages plays the most important role in determining the online learning viewer's decision to continue to learn. The narrative techniques were divided into two categories - literary devices and media devices.
- The findings from the artefacts' frame and framing analysis were triangulated with the findings from the participants' reflections. The findings of the message

framing were summarised to provide a principle insight for framing triggering messages for the introduction to an online teacher's professional development on dyslexia for teachers in Malaysia and other countries with similar awareness background.

3.5 Pre-Message Framing

According to several large scale research by Peters (2010), Dzalani and Shamsuddin (2014) and Sylvia (2009), Malaysians' teachers lack dyslexia awareness. Findings from research on inclusive education policy (Jelas *et al.*, 2006; Pei, 2016); and on special need training to prepare teachers for inclusive education (Abdul Rahman and Nazariyah, 2013) combined showed Malaysian teachers' and policy makers' have misconception towards inclusive education. It is anticipated that Malaysia needs a solid teacher professional development before the inclusive education policy could be effectively implemented. Thus, an in-depth study on the teachers' specific knowledge or gap existence in dyslexia awareness is vital so the professional development module to be implemented in future is suffice to scaffold the knowledge and awareness of the education professionals in Malaysia.

To gain a better understanding of the current problems related to dyslexia awareness among Malaysian mainstream primary school teachers, two Facebook closed group discussions hosted by two research assistants were observed. Although the findings from the pre-message framing phase are not the main findings in this study, the findings are significant as they provide an insight for the participants' zone of proximal development on knowledge about dyslexia and suggest the content for the selection of artefacts to be utilised in the message framing phase.

3.5.1 The Data Collection

The data for pre-message framing study were collected in two stages: i) the observations of two groups of teachers' discussion on social media; ii) the in-depth interviews of selected fifteen participants. Of the fifteen selected participants, nine participants were identified during the discussion on the social media groups, whereas six participants volunteered to participate after they were informed about the study by the other. There was two information sought from the message framing phase data collection:

- i. The teachers' beliefs about the literacy screening and remediation programme [LINUS].
- ii. The teachers' current knowledge and beliefs about dyslexia and its issues related to inclusive policy.

Two appointed research assistants (RA- coded as RA^a and RA^b) were assigned to post questions related to LINUS programme on their Facebook wall. In general, the RAs' postings on Facebook (FB) encouraged the RAs' colleagues to share their views on their experience in:

- i. Conducting the LINUS screening test;
- ii. Implementing the intervention programme; and
- iii. Reporting the Linus students' progress.

The following is the procedure of the pre-message framing study:

- i. The two RAs posted questions for primary school teachers on their Facebook walls about teachers' experience and beliefs in conducting LINUS program as well as dyslexia awareness. The actual postings from RA^a and RA^b could be viewed in chapter 4.
- ii. The participants replied to the postings. The participants' response threads were automatically recorded. Data were copied from Facebook to words documents and saved in the researcher's PC at the University of Southampton.
- iii. The participants' replies on questions related to LINUS programme gave some insights to the Malaysian teachers' awareness about learning difficulties and dyslexia identification. The second Facebook postings featured questions specifically about dyslexia.
- iv. The two RAs posted the questions about dyslexia.
- v. The participants replied to the postings about dyslexia. The participants' response threads were automatically recorded, copied to words documents, and saved.
- vi. All the responses from both postings were analysed qualitatively using a thematic analysis.
- vii. Themes that emerged from the data analysis were used to generate individual in-depth interview questions. Nine participants were recruited for the in-depth instant messaging interviews via WhatsApp. Another six participants were informed about the study and contacted for recruitment. In total, fifteen participants were recruited.
- viii. The instant messaging interviews were conducted from March 2017 to the end of April 2017.
- ix. The interview data were automatically recorded and copied to words documents and saved in the researcher's PC at the University of Southampton.
- x. The interview data were analysed qualitatively using a thematic analysis.
- xi. The conclusions of the findings were used to select the artefacts to be studied in message framing study.

The interviews ceased when the data are saturated or "do not shed any further light on the issue investigated" (Mason 2010 p.2). The data saturation in this study was characterised by [i] the

same pattern of answers given by all participants; [ii] the same answers are given by the same participants.

The following example is the saturation marked by the same answers given by the same participants. R13 believed that dyslexic students do not perform in academic because they lack interest in the learning. Interview 1 was about the factors that contribute to students' low academic performance; while interview 2 is about intervention for students with dyslexia. Both questions were asked to understand the teachers' perception of dyslexic students. It was understood from the interviews with R13, that R13 believes that students with dyslexia are like weak students who have less interest in lessons. The key phrases were underlined.

Interview 1

R13: Meaning... The problem with the weak student is the lack of study interest. So need to attract their interest.

Interview 2

R13: In the case of dyslexia, the remedial teacher will help.

Interviewer: Is there a special syllabus?

R13: No... That's why we need to do something...Like I said earlier, build more teaching aids and conduct teaching and learning that gain the students' interest.

3.5.2 The Data Analysis

The inductive thematic analysis process commences with the information encoding. The coding development process begins with recognising a code (Boyatzis 1998) that "captures the qualitative richness" (Fereday and Muir-Cochrane 2006). The codes then grew into several levels, regrouped and incorporated into more general higher-order codes, which can give a good overview of the emerging themes (King 2004). This study employs signalling adjectives as basic coding identification. The identification of signalling adjectives is useful in categorising a simple or single answer to questions such as describing dyslexia and the participants' emotions. Igartua *et al.* (2003) claim that the receiver's "inner dialogue about the message" (p. 515) is implicitly represented via the receiver's reflection. Some of the signals used to detect emotion are "happiness, sadness, anger, fear or anxiety, disgust, guilt, shame, pride, and attachment or attraction" (Igartua *et al.* 2003, p. 517).

When describing what the participants know about dyslexia, keywords such as disable, special kids, lazy and stupid were easily identified. When describing their feelings, signalling words such as angry, sad, frustrated, and perplex are used by the participants. Hence, from the signalling adjectives, more themes were identified; and developed by searching more information from the

data available and conducting follow-up interviews with the participants before the data are finally interpreted and conceptualised. Refer to Appendix B for data analysis process.

In the pre-message framing phase, the initial codes were written based on the literature reviews. From the literature, it was learnt that Malaysian teachers have little awareness about dyslexia. Therefore, the initial coding starts with i) what do the participants know about dyslexia and ii) what the participants don't know about dyslexia? The initial analysis indicated that the participants know about the existence of dyslexia; have basic knowledge about dyslexia identification and intervention, but have some misconceptions about dyslexia. The participants did not know that dyslexic's brain works differently from the non-dyslexic brain; dyslexics can learn in a mainstream class if they received the right supports. The definition of dyslexia; dyslexia identification and intervention; and the dyslexia misconceptions were then coded as the emerging themes. The emerging themes were then used to develop further questions for the follow-up interviews.

The themes emerged from the data in this section were described as themes and codes. The emerging themes from the data were named as themes. After the themes regrouping process, the themes were developed into general final themes and utilised as codes for the next data analysis level. The data collection and analysis stages in this study were conducted concurrently. The above-mentioned themes were regrouped and developed into two codes- 'knowing' and 'not knowing'- that were later used for data analysis for the Facebook discussion observation. From the basic codes 'knowing' and 'not knowing,' other themes emerged and then were developed again into several levels to form the prescriptions for semi-structured interviews and regrouped into more general final themes. The emerging coding levels are illustrated in the following outline.

1. What do the participants know about dyslexia [Codes inductively derived from literature review].
 - 1.1. The existence of dyslexia [Themes emerged from interviews]
 - 1.2. Basic knowledge about dyslexia identification [Themes emerged from interviews]
 - 1.3. Basic knowledge about dyslexia intervention [Themes emerged from interviews]
2. What the participants don't know about dyslexia [Codes inductively derived from literature review]
 - 2.1. Dyslexia's brain works differently from the non-dyslexia brain [Themes emerged from interviews].
 - 2.2. Dyslexics can learn in a mainstream class. [Themes emerged from interviews]
3. The participants have some misconceptions about dyslexia [Codes inductively emerged from interviews].

- 3.1. Dyslexia is a problem with writing [Themes emerged from interviews].
- 3.2. Dyslexia is a form of disability/ handicap [Themes emerged from interviews].
- 3.3. Dyslexia can be cured [Themes emerged from interviews].

The emerging themes were later regrouped and incorporated into two general higher-order codes, and three secondary-level codes as depicted in the following table 3-2.

Table 3-2 Emerging Themes from the Regrouped Emerging Codes

General higher - order codes	Secondary- level codes	Source of codes [from the emerging themes]
1. Dyslexia conception	Dyslexia definition	1.1
	Dyslexia identification	1.2
	Dyslexia Intervention	1.3
2. Dyslexia misconception	Dyslexia definition	2.1; 3.2
	Dyslexia identification	3.1
	Dyslexia Intervention	1.3; 2.2; 3.3

The findings from the pre-message framing phase [refer to chapter 4] suggested that the participants have some knowledge about dyslexia, including the practical knowledge of dyslexia identification and intervention. Nonetheless, there are several misconceptions about dyslexia that exist. Hence, the right conceptions and the misconceptions of dyslexia should be highlighted as the findings for the first research question of the study - What is the level of dyslexia awareness among the Malaysian primary school teachers?

3.6 Message Framing Phase

Message framing is seen as a device that facilitates information organization (Gitlin, 1980). It involves the selection of perceived reality [by the message sender] to make the audience more salient in communicating with the message (Entman, 1993) and be influenced in decision-making.

The main purpose of the study is to understand the framing of the messages that trigger the participants' learning about dyslexia. The model adopted for the dyslexia awareness oTPD is the neurodiversity model that builds dyslexia conception on brain neurology, promote the strengths of the dyslexics, and the right supports for dyslexia identification and intervention. Thus, the selected artefacts should contain the criteria mentioned. For the message framing study, the selection of the artefacts was done with the advice received from the dyslexia experts from the University of Southampton and Dyslexia International. As a result, two short videos were selected:

Dyslexia Explained [V1] and Dyslexia a Hidden Disabilities [V2]. The third artefact, Tare Zameen Parr [V3], was recommended by three participants. It was selected because it fulfilled the selection criteria and agreed to be viewed by all fifteen participants.

- a. *Dyslexia Explained: What's it like Being Dyslexic* is a short animation video that tells the story of a child with dyslexia struggling at school based on the true-life school experience of the CEO of Nessy Learning.
- b. *Dyslexia: A Hidden Disability* is a documentary about children and successful adults who have dyslexia. It features interviews with popular personalities including Steven Spielberg, Charles Schwab, Whoopi Goldberg, Sally Shaywitz, and Craig Watkinson.
- c. *Taare Zameen Par*, is a Hindi movie that explores the life of a dyslexic child at home and in school.

The selection of the artefacts is based on specific criteria promoted by the neurodiversity model which enhances the viewers' understanding of the nature of dyslexia difficulties (Jordan et. al 2009); and dismisses neuro myths about dyslexia (Zadina 2015; Howard-Jones 2014). The artefacts should also trigger the viewers' shift of paradigm by encouraging viewers to look into the dilemma (Norwich 2007) of being a learner with dyslexia whose strengths are not fairly utilised and the weaknesses are fairly accommodated.

Overall, the artefacts should aim at transforming the viewers' beliefs that with the right support and accommodation, people with dyslexia can succeed like any other person (Howard – Jones 2014; Kelly 2019). The primary purpose of the study is to understand how the framing of the triggering messages are disseminated via the artefacts at large; it is not to analyse the artefacts per se. Refer to Appendix C for the synopsis of each artefact.

3.6.1 Data Collection

The message framing phase is the main phase of the study. It is divided into two parts: [i] the identification of the triggering messages; and [ii] the story framing of the selected artefacts and the triggering messages.

Part 1: The Identification of the Triggering Messages

The goal of the first part of the message framing study is to identify the triggering messages. The participants were asked to view all three artefacts. The artefacts were disseminated via WhatsApp. The participants reflected on the artefacts that trigger them to learn more about dyslexia. The researcher constantly contacted the participants to check if the participants were

ready for the interview via WhatsApp instant messaging. During the interviews, the researcher asked two basic semi-structured questions:

- i. What did you think when you watch V1, V2, and V3?
- ii. How do you feel watching V1, V2, and V3?

The triggering messages were identified by the participants' recognition, recall, and reflection about their feeling and thinking about particular scenes, characters and issues in the artefacts viewed [two short videos and a movie]. The four events of [online] learning inquiry process adopted from Garrison *et al.* (2001) model of practical inquiry was used to confirm the triggering aspect of the messages identified. Thus, in order to guide the researcher in conducting the semi-structured follow-up interviews, the four events were adopted as the interview protocol. The questions asked within the scope of the four events highlighted below, and the participants' responses were recorded and categorised accordingly:

- i. Triggering event (establishing the awareness and shared aspiration)
- ii. Exploration event (building up understanding and knowledge)
- iii. Integration event (emerging ideas and decision making)
- iv. Resolution event (intention to act)

Part 2: The Story Framing of the Selected Artefacts and the Triggering Messages

The goal of the second part of the message framing study is to understand how the messages trigger the participants. A frame is the property of a message that "defines the message's meaning by shaping the inferences that individuals make about the message" (Hallahan 1999, p.207). As the selected artefacts were two short videos and a movie, the best way to understand the framing of the triggering messages is by determining how the story is framed. According to Hallahan (1999), story framing is the most complex framing, which involves:

- i. Key themes/ ideas that focus on the message.
- ii. Narrative techniques that support the themes.

According to Choi and Lee (2006), the role of a scene in a story framing could be identified by analysing the scene's position, length, and proportion. Prior to the message framing analysis, the researcher with the help of an expert in dyslexia analysed awareness campaign themes applied by British Dyslexia Association [BDA] and International Dyslexia Association [IDA] in their dyslexia online training. The online dyslexia training by BDA and IDA was chosen as the benchmark because IDA represents the research-based group, while BDA represents the practitioner-based group. The IDA collaborated with University of London and UCL Institute of Education dyslexia in producing its online training; whereas the BDA's partners are Dyspraxia foundation, Dyslexia action, Helen Arkell, Manchester Metropolitan University and PATOSS. From both online training,

the researcher discovered that the key themes utilised are the awareness [definition, what's like being dyslexic, positive highlights of dyslexic and spectrum of SpLD]; and the pedagogical content knowledge [identification and intervention]. Messages on dyslexia awareness should lead the participants to carry out dyslexia identification and intervention to support dyslexic learners. Therefore, the key themes determined for the current dyslexia awareness messages framing analysis were awareness, identification, and intervention. Thus, the awareness, identification, and intervention frames in the artefacts studied were defined by the position, length, and proportion of the scenes in the artefacts.

There were two narrative techniques that support the framing of the triggering messages which were employed for the message framing analysis in the current study: the literary devices and the media devices. The analysis of the framing literary devices was guided by the typology of models of framing applicable to public relations by Hallahan (1999). The typology of models of framing applicable to public relations is the best analysis template to be utilised in the study because the participants of the study were teachers who are not trained for dyslexia support. An untrained participant's level of awareness is similar to that of the untrained public. There are seven framing models applicable to public relations: situations, attributes, choices, actions, issues, responsibility, and news. The typology of models of framing applicable to public relations is described in table 3-3 below. However, after the data summary and the initial themes identification process, the news frame was found to be irrelevant for the current study.

Table 3-3 Typology of Seven Models of Framing Applicable for Public Relations (Hallahan 1999, p.210)

What is Framed	Description	Key Sources
Situations	Relationships between individuals in situations found in everyday living and literature. Framing of situations provides a structure for examining communication. Applied to discourse analysis, negotiation, and other interactions.	Bateson (1972), Goffman (1974), Putnam and Holmer (1992). Tannen (1993)
Attributes	Characteristics of objects and people are accentuated, whereas others are ignored, thus biasing the processing of information in terms of focal attributes.	Ghanem (1997), Levin, Schneider, and Gaeth (1998), McCombs and Ghanem (1998), Ries and Trout (1981), Wright and Lutz (1993)
Choices	Posing alternative decisions in either negative (loss) or positive (gain) terms can bias choices in situations involving uncertainty. Prospect theory	Bell, Raiffa, and Tversky (1988). Kahneman and Tversky

	suggests people will take greater risks to avoid losses than to obtain gains.	(1979, 1984), Levin, Schneider, and Gaeth (1998)
Actions	In persuasive contexts, the probability that a person will act to attain the desired goal is influenced by whether alternatives are stated in positive or negative terms.	Maheswaran and Meyers-Levy (1990), Smith and Petty (1996)
Issues	Social problems and disputes can be explained in alternative terms by different parties who vie for their preferred definition a problem or situation to prevail.	Best (1995), Gamson and Modigliani (1989), Snow and Benford (1988, 1992)
Responsibility	Individuals tend to attribute the cause of events to either internal or external factors, based on levels of stability and control. People portray their role in events consistent with their self-image in ways that maximize benefits and minimize culpability. People attribute causes to personal actions rather than systemic problems in society	Iyengar (1991), Iyengar and Kinder (1987). Kelley (1967, 1972a), Protesse et al. (1991), Wallack, Dorfman, Iernigan, and Themba (1993)
News	Media reports use familiar, culturally resonating themes to relay information about events. Sources vie for their preferred framing to be featured through frame enterprise and frame sponsorship.	Gamson (1984), Gamson et al. (1992), Ryan (1991)

Besides the literary devices, this study also seeks to understand how the media devices were employed to support the framing of the triggering messages. The media devices were categorised into visual and audio. The visual categories include the text/subtitles (list of common dyslexia traits); text/captions (position of the interviewees); montage (description of mind activity); text (English subtitles); close-up (camera); facial expressions; and gesture. The audio categories include the background music; voice over; sound effects; and real character's voice.

3.6.2 Data Analysis

The process of data analysis delineated in this section demonstrates how the inductive and deductive hybrid approach of coding and theme development was applied in the study. Overall, the themes for the research findings emerged through the process "careful reading and re-reading of the data" (Rice and Ezzy, 1999, p. 258). In the message framing phase of the study, the deductive thematic analysis approach was also employed together with the inductive thematic analysis approach. For the message framing study, the codes were written with reference to the second and third research questions and the theoretical framework. The initial codes were developed based on:

- i. Part 1 - the model of practical learning inquiry (Garrison et.al. 2001)
- ii. Part 2 - the story framing analysis (Hallahan 1999).

The hybrid inductive and deductive approach in this study adopted six stages data analysis process, which was demonstrated by Fereday and Muir-Cochrane (2006) in their study in nursing. The steps are as follows.

Part 1: The Identification of the Triggering Messages

Stage 1: Developing the coding manual

Developing the coding manual for the first part of the message framing phase is quite tricky. Although the four events of the online learning inquiry process were utilized as the coding manual, in this study, the four events were separated into two categories: the main event [the triggering event] and the supporting events [exploring, integrating, and resolution]. The aim of the participants' artefacts reflections was to identify the triggering messages that lead the participants to self-explore the knowledge about dyslexia. This is because, in online professional development, it is crucial for the messages to trigger the learners' learning inquiry as the learners would only volunteer to participate in online courses when they are triggered. The triggering messages were identified from the participants' reactions when they reflect each artefact; the scenes they recalled; and the characters they recognised. From the previous literature, two sources of reactions were recognized: the cognitive [thinking] and the affective [emotion]. Therefore, the participants' thinking and emotional reactions were used as the coding manual used to identify the triggering messages. Whereas, the participants' reflections that indicate knowledge exploration, integration and resolution were used to endorse the triggering messages.

Table 3-4 Coding Manual for the Identification of Triggering Messages and the Participants' Learning

Online Learning Inquiry Process
Trigger [establishing the awareness and sharing aspiration] <ol style="list-style-type: none"> 1. Expressions that indicate emotions. 2. Expressions that indicate thinking.
Explore [building up understanding and knowledge]
Integrate [emerging ideas and decision making]
Resolution [intention to act]

Stage 2: Testing the reliability of the code

The coding manual was used to analyse the data from the participants' reflection of V1. The initial analysis from the participants' reflection of V1 indicated that the participants expressed their emotions and thinking when reflecting V1. Further analysis showed that there was evidence of the participants clarify new information and request for more input, especially on dyslexia identification. This suggested that the participants build up their understanding and knowledge. Further analysis of the participants' reflection showed that there was evidence of the participants integrating new information and old information, and finally found the resolutions for the problems they recognised throughout the process. However, since the participants have watched all three artefacts prior to the interview sessions, the researcher could not identify which artefact specifically contributed to the whole process of learning inquiry. Besides, the main target of the study is to identify the triggering messages, not the triggering artefact. It is essential to note that all three artefacts contain important awareness messages but were framed differently. It was possible that the triggering messages occurred in all three artefacts; the first part of the message framing study was to identify the triggering message and check the validity of the triggering message by searching for the evidence of the other events that take place throughout the learning inquiry process.

Table 3-5 Results from the Code Reliability Testing

Online Learning Inquiry Process	Data from the participants' artefact viewing reflection
Trigger [establishing the awareness and sharing aspiration]	1. Expressions that indicate emotions: Sad, Angry, Guilty 2. Expressions that indicate thinking: Problem with reading
Explore [building up understanding and knowledge]	Clarification of new information and request for more input.
Integrate [emerging ideas and decision making]	Reflection on self-experience and what is happening in the participants' classroom; the encounter with their students; possible solution, setbacks, and challenges.
Resolution [intention to act]	Identifying immediate action to be taken; possible action to be taken and policy and political implications.

Stage 3: Connecting the codes and identifying themes

According to the original procedure suggested by Fereday and Muir-Cochrane (2006), after the reliability of the codes were tested, the third stage is to summarise and identify the initial theme.

Then the fourth stage is to apply the template and the additional coding. Since there were no emerging codes emerged from the pre-determined code manual, the third and the fourth steps were skipped. The next procedure applied was to connect the codes and identify the themes.

In identifying the triggering messages, the emotion and thinking were set as the two initial main codes. It was identified that the participants expressed the emotions such as sad, angry, and guilty as initial reactions towards the messages. Later, the participants started to reflect on their own experience. It was recognised that when the participants talked about their emotions, they skipped the clarification part [explore the new knowledge] and jumped into emerging their ideas in emotional ways. However, further analysis of text showed that the participants expressed their anger towards two different categories – self and organisation. Further interviews with the participants revealed that the anger towards the organisation came in different ways, such as the education system, the socio-culture, and the provisions. The emerging themes were illustrated in figure 3-2 below.

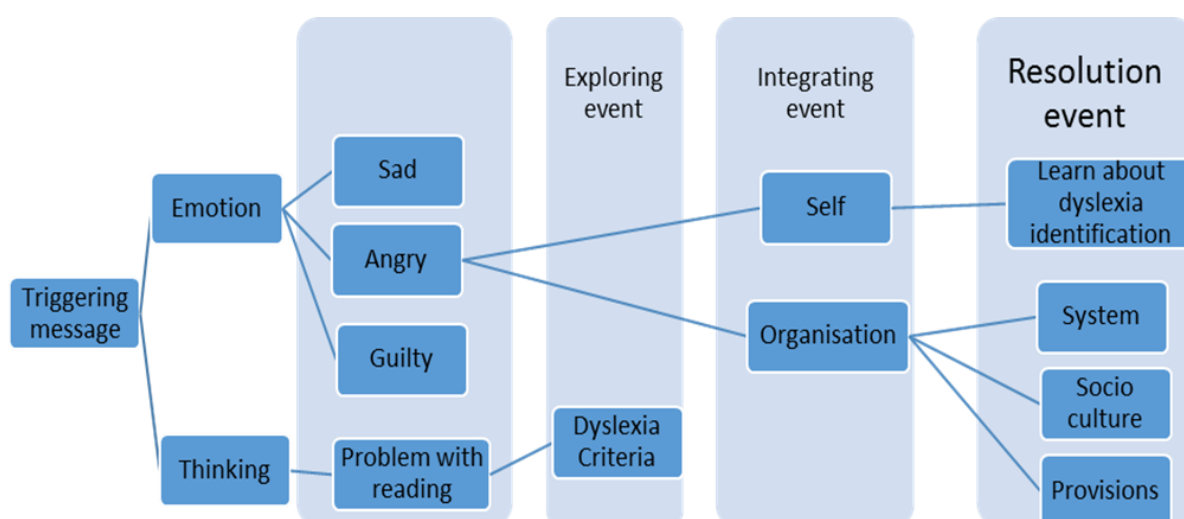


Figure 3-2 Expansion of Codes for Second Research Question

Stage 4: Corroborating and legitimating coded themes

The term corroborating in this stage is used to define the process of findings confirmation (Crabtree and Miller 1999). This process ensures that the clustered themes represented the findings. The excerpts from the participants' interviews were categorised according to the meaning in context. According to Edwards and Potter (2005), people express 'the inner life of the mind' in written and spoken form, implicitly or explicitly (p. 243). It is also important to know that meaning is not only interpreted via linguistic representations only but also inter-linguistics representations (Kress and Van Leeuwen 2001). Hence, in order to identify how the teachers, as the message recipients in this study, learn about dyslexia at each stage of the inquiry process

(Garrison *et al.* (2001), the researcher believes that the best way to analyze the teachers' reflection is by analyzing the meaning in context.

An author of a text produce meanings against their beliefs, emotional and cognitive states while interacting with their natural and social environment. The author in this study refers to the participants who produced their reflections via whatsapp instant messages. Such construction of meaning is a "complex process and involves both the conscious and unconscious use of symbols" (Mantzavinos 2016, p. 7). The analysis of the interviews does not only attempt at analysing the forms of the text but also aiming at functions of the text with a deeper sense of meaning. The following typology of seven questions has been widely used by interpretavist (Detel 2011):

- i. Who (is the author)?
- ii. What (is the subject matter)?
- iii. Why (was the text written)?
- iv. How (was the text composed)?
- v. When (was the text written)
- vi. Where (was the text written)
- vii. By which means (was the text written)

Therefore, when interpreting the text (the participants' whatsapp instant messages), the researcher also paid attention to each of the participant's background, beliefs, level of dyslexia awareness, teaching experience and map the information out with the Malaysian education context at the moment of the interviews. As whatsapp provided paralinguistic affordance such as emoticons and symbols to express the online communication jargon, the paralinguistics aspects of the messages were also taken into consideration when the meaning was interpreted.

Since the structure of Malay language and English language is significantly different (Beebe 1988), back-to-back translation does not work. Thus, to ensure that the analytic interpretations were drawn from the social context (Temple *et al.*, 2006), the excerpts were kept in its original language during the data categorisation. The excerpts which were used as cited evidence were translated into the English language. Hence in this thesis, the reader would be able to read the English language version of the excerpts in the finding chapters. The researcher has also provided some notes to describe the language nuances in the English translation version.

Part 2: The Story Framing of the Selected Artefacts and the Triggering Messages

There were three aspects investigated in the second part of the message framing phase.

- i. Key themes/ ideas that focus on the message.
- ii. Narrative techniques that support the themes.
 - a) Literary techniques

b) Multimedia techniques

Therefore, three code manuals were developed as the priori for the data analysis of the messages key themes, the literary techniques as a narrative technique, and the multimedia techniques as a narrative technique.

Stage 1: Developing the coding manual

Key themes/ ideas that focus on the message

The three codes identified from the common pattern on dyslexia online training by BDA and IDA were set as the priori for the key themes analysis of the story – awareness frame, identification frame, and intervention frame. The duration of the stories content was calculated, allocated, and the shots were plotted to visualise the frame of each artefact.

The literary techniques as a narrative technique

Seven codes were taken from the seven framing models applicable to public relations by Hallahan (1999). Review of previous literature shows that most researchers employ three framing models at most, which were pre-determined before the study and analysed quantitatively. In this study, however, the researcher decided to identify the framing models applied by analysing the artefacts instead of selecting particular framing models as a coding template to analyse the artefacts. The seven framing models are situations, attributes, choices, actions, issues, responsibility, and news.

The multimedia techniques as a narrative technique

There are two basic elements of multimedia devices: the audio and the visual parts. The researcher decided not to limit the audio and visual techniques to be studied for the artefacts but rather explore as many techniques as possible that probably utilised to support the messages.

Stage 2: Testing the reliability of the code

In order to test the reliability of the codes, the content of V1 was analysed. The scripts were coded into three frames: awareness, identification, and intervention. The scene's position, length, and proportion were measured. The shots were plotted to picture the overall frames.

Table 3-6 Results for the Key Themes Codes Reliability Test

Dyslexia awareness campaign themes	Data from the artefacts' [V1] framing analysis
Awareness frame	69.3 percent
Identification frame	16.9 percent

Intervention frame	14.96 percent
--------------------	---------------

Data from the participants' artefact [V1] viewing reflection and the data from the V1 framing analysis were laid out to compare whether or not the Hallahan's seven models of framing analysis is applicable for the study's analysis. The analysis of the artefacts and the participants' reflections revealed that only the news framing model was not applicable in the framing of dyslexia messages in all three selected artefacts. Therefore, the news was later removed from the coding manual.

Table 3-7 Results for the Coding Manuals for the Literary Devices Analysis Reliability Test

Hallahan	Data from the participants' artefact [V1] viewing reflection	Data from V1 framing analysis
Situations	Teacher and dyslexic student's communication in the classroom.	1. Teacher and dyslexic student's communication in the classroom. 2. Dyslexic student and his mother's communication at home.
Attributes	1. Ignorant teachers.	1. Ignorant teachers. 2. Marginalised dyslexic student.
Choices	1. Negative – risks of denying dyslexic student's opportunity to learn better. 2. Positive – early identification could assist teachers in providing the right support for dyslexic students.	1. Negative – risks of denying dyslexic student's opportunity to learn better. 2. Positive – early identification could assist teachers in providing the right support for dyslexic students.
Actions	Participants' enthusiasm to learn about dyslexia identification.	1. Teacher and parents' responsibilities for early identification
Issues	Implications for failure in identifying problems with dyslexia.	Implications for failure in identifying problems with dyslexia.
Responsibility	Teachers and parents.	Teachers and parents.
News	Not Applicable.	Not Applicable.

In previous message framing phase, the teacher and dyslexic student's communication in the classroom [from V1] has been identified as one of the triggering messages. Therefore, the scenes related were analysed to test the reliability of the coding manual for the multimedia technique.

Table 3-8 Results for the Coding Manual for the Media Analysis Reliability Test

Media	Data from the 'teacher-dyslexic student's communication in the classroom' message framing analysis.
Audio	<ol style="list-style-type: none"> 1. Background music. 2. Voice over. 3. Sound effects.
Visual	<ol style="list-style-type: none"> 1. Text/subtitles (list of common dyslexia traits). 2. Close-up (camera). 3. Facial expressions. 4. Gesture.

The coding testing process was supervised by the researcher's supervisor. The results were discussed, and it was agreed that the coding manuals were relevant for the study.

Stage 5: Connecting the codes and identifying themes

At this stage, the codes were connected, and the themes were identified and clustered under headings that directly answer the research questions. It is vital to remember that the message framing analysis was only conducted to identify the frames and framing of the triggering messages and determine how the narrative devices were utilised to support the framing that depicts the triggering messages. The framing of the non-triggering messages was not analysed.

3.7 The Instant Messaging Interview Mode

The growing numbers of online communities have led to a different way of communicating and collecting data. Thus, it is important for researchers to be up-to-date with the developments (Redlich-Amirav and Higginbottom 2014). Since the main constraint for data collection for this study is time, the online data collection method is adopted. The participants of this study are busy teachers in Malaysia who live 6,579 miles away from the researcher. It was anticipated that a face-to-face approach is more complicated for the following reasons:

- i. Face-to-face interviews require participants' high commitment. Setting times for an interview demand the participants be at the setting within the fixed time. Since the teachers are extremely busy, there is a risk of appointment cancellation and rescheduling of the appointment. Even worst, the participants may not agree to participate as they fear of failing to commit to the research. Collecting data via online communication will allow both researcher and participants to have time flexibility and space for rearrangements within the data collection period.
- ii. Times differences between Malaysia and the UK demands the researcher to travel to Malaysia and set appointments with teachers for data collection. However, with social media chatting platform, the researcher does not have to travel for interviews because the participants may respond at any time convenient [within the period] to them without having a problem to be engaged in the fixed interview date.

There were several advantages of using the instant messaging interview mode in this study from the planning stage, executing the interview stage to the processing of the data collection stage.

Table 3-9 indicates the advantages of interviewing using an instant messaging mode.

Table 3-9 Advantages of Conducting Interviews Via Instant Messaging Mode (Aida et al. 2019).

Mode	Planning Stage	Execution Stage	Processing Stage
IMI	a) Ease of sharing potential participants' contacts. b) More negotiation opportunities for recruitment. c) Participants prefer the interviews to be conducted after office hours. d) Allow documents sharing.	a) Flexibility to conduct interview – time & place. b) Reduce discomfort of being known. c) Very minimal cost. d) Facilitate para-linguistic data such as emoticons and stickers. e) Interpretation of para-linguistic data could be deceiving. f) Direct responses which allow participant to probe for further explanation in flexible time.	a) Ease transcribing process b) Reduce transcription mistakes c) Convenient for follow-up interviews.

Most importantly, according to Kozinets (2015), online data collection encompass curation and creation of data include “graphical, visual, photographic, audio, and video information as shared

online, as well as looking at text in context, including font, colour, size, placement and so on” (p.172).

3.8 The Context of the Research

It is noteworthy to know that this study is inspired by the Malaysian education system aspiration to adopt inclusive education policy – the policy reform that aims at cultural-transformation which is complex and multifaceted (Kennedy, 2016). Reviews of the literature revealed that it is crucial for the teachers to first share the same values as the value of the changed-oriented policy itself before they could play the roles of policy agents (Pajares, 1992; Fullan, 2007; Day and Smethem, 2009). The changes in education policy in Malaysia lead to dilemmas faced by teachers and society. The enthusiasm of implementing inclusive education policy implies students with hidden learning disabilities such as dyslexia [the term learning disability is used in this study as Dyslexia is yet to be known as specific learning differences in Malaysia]. In the area of special need, a lot of effort has been placed/put on students with physical disabilities (Muhamad Nadhir and Alfa Nur Aini 2017). Another huge amount of focus is also given to students who are talented in sports arts (PADU, 2017). The huge amount of effort given to facilitate the ‘marginalised’ students like students with physical disabilities and low attainments could cause the needs of a student with hidden learning disabilities such as dyslexia being overlooked, and their problems continue to be hidden.

In Malaysia, a literacy intervention program was developed in 2006 known as KIA2M; changed to 3M in 2008 to include arithmetic skill, and improved by including screening instrument known as LINUS in 2010. LINUS programme is named after the literacy and numeracy screening procedure. In the year 2013, LINUS program was improved and known as LINUS 2.0. LINUS screening is conducted twice a year to year 1, 2, and 3 primary school students. LINUS instrument includes dyslexia screening instrument. Following the screening, students who fail to meet the national curricular standard for literacy and numeracy will be enrolled in LINUS intervention programme. According to Ahmad and Mutalib (2015), LINUS programme is a remedial programme designed to ensure the competency of each student in Malay language [Bahasa Malaysia] and arithmetic [Mathematics]. Students who attend the remedial programme is labelled as LINUS students. Since LINUS programme is closely related to dyslexia, the implementation of LINUS programme was set as the topic for discussion with the teachers [participants] in this study and further used to determine the teachers’ knowledge [or awareness] gap about dyslexia in the pre-message framing phase of the study.

3.9 The Participants

There were fifteen participants of the study who are the teachers in Malaysia's primary schools.

Before the participants' recruitment, a small scale survey was conducted. There were two purposes of the FB-group-discussion observation: to better understand the current level of dyslexia awareness among the Malaysian teachers and to recruit the participants of the study.

For the small scale survey, two colleagues [primary school teachers in Malaysia] have been approached to be the research assistant [RA]. The RAs acted as the mediator to assist the researcher with the postings of small scale survey questions related to dyslexia and LINUS implementation in their Facebook walls. The reasons for the need to recruit RAs are:

- i. The RAs are primary school teachers. They are the insiders whom the participants will not regard as threats.
- ii. The RAs have a list of Facebook friends who are primary school teachers. Via their assistance, the researcher could reach other primary school teachers all over Malaysia.
- iii. The RAs played the role of mediators between the teachers [participants] and the researcher. Via the RAs, the researcher was introduced to the participants. After the introduction, the researcher started to build a rapport with the participants. Once the rapport was established, the researcher contacted the participants personally and conducted the interviews without the RAs' involvement anymore.

Before the start of the study, the RAs have been briefed on the objectives of the research and how the research will be conducted. Throughout the small scale survey data collection process via Facebook, the researcher personally facilitated and assisted the RAs by instant messages [WhatsApp] so that the RAs could probe questions to the teachers [who are the RAs colleagues and Facebook friends]. The RAs and their colleagues' discussion on Facebook were monitored by the researcher on screen.

From the literature, the researcher has been informed that Malaysian teachers have limited exposure to special need education except for the teachers who are assigned to teach students with a special need. Hence, during the Facebook discussion between the RAs and their colleagues, the researcher observed the teachers' conversation in order to analyse the theme of questions for an in-depth individual interview that would be generated. Potential participants for the in-depth individual interview were also identified during the survey and approached by the RAs. All 27 teachers participated in the Facebook discussion revealed that they were not trained and have limited knowledge about dyslexia. Nine participants who took part in the Facebook discussion agreed to participate in the study and were contacted for in-depth individual interviews. Six

participants for in-depth individual interviews were either introduced to the researcher [snowball approach] by other participants or volunteered to be participants after they were informed by the word of mouths from the participants' friends. In total, 15 teachers agreed to be the participants for the study on dyslexia awareness.

All the 15 participants who took part in the in-depth interview, were also recruited to be the participants for message framing study [phase two]. The profiles of the sample group are presented in Table 3-9 below.

Table 3-10 Participants' Profile

Participants' Code	Subject taught	Gender	Teaching Area [Peninsular Malaysia]
R1	English Language	Female	South (urban)
R2	English Language	Female	East (urban)
R3	English Language	Female	South (urban)
R4	English Language	Female	South (urban)
R5	Religious study	Female	West (urban)
R6	Malay Language	Female	South (urban)
R7	Religious study	Female	South (urban)
R8	English Language	Female	North (rural)
R9	English Language	Female	South (urban)
R10	English Language	Male	South (remote/aborigine village)
R11	English Language	Female	South (urban)
R12	English Language	Female	North (urban)
R13	Remedial	Male	South (rural)
R14	Mathematics	Male	South (urban)
R15	History	Female	South (urban)

Note: Teachers in Malaysia teaches a specific subject. It is important to note that the researcher has not intended to make finding a comparison between the participants. The main focus of the study is to understand the message framing, not the participants.

3.10 Research Ethics

In considering the research ethics, the researcher has taken appropriate measures to ensure the legitimate access to the research stakeholders' 'voice, image, copyrights, and access to their personal brands' (Kozinets 2015, p.177). In this section, the stakeholders'- namely the University of Southampton, the research participants, and the government of Malaysia – ethical considerations are discussed.

With regards to the University of Southampton, the ethics approval has been acquired from the University of Southampton ethics committee (reference number: 24854). All participants were informed in the consent form, transparent and open information about the research and the opportunity to withdraw within three days of the group interview session. The respondents' personal data were not used in the analysis. The respondents were anonymised at the point of receipt using pseudonyms. As participants contributed their detailed experiences in this study, the researcher ensured that the exercise was purely academic, and their identities were withheld. The ethics committee required the researcher to submit: the risk assessment form [Appendix D]; the consent form [Appendix E]; the ethics application form [Appendix F]; the participant information sheet [Appendix G]. The participants' consent form was exchanged via WhatsApp. Refer Appendix H for sample for consent form exchanged via WhatsApp.

It was mentioned in the participant information sheet that the participants were given freedom to withdraw from the study if they do not agree to get involved at any point in time. However, the data before their withdrawals could still be used for the study as agreed by all the participants and the researcher before the data collection. During the data collection process for the message framing part 1 [individual interviews on participants' reflection on artefacts], two participants [R3 and R7] declared that they could not commit with the follow-ups interviews. Hence, only one follow-up interview was carried out with R7 and two with R3. Nonetheless, R3 and R7 have reflected the artefacts based on the main interview questions. Although R3 and R7 had viewed all three artefacts, the researcher could not ask both participants' opinion about each artefact. The details of each participants' reflections were based on the second question in the interview question protocol that is - What is the most interesting information? Is there any new information? Both questions lead to the identification of the triggering messages. Besides, the further information related to the participants' feeling about certain message ratified that the

most interesting messages perceived by R3 and R7 were the same messages that stirred both participants' emotions. Following the R3 and R7 withdrawal, the researcher had to organise the reflection based on the number of participants reflected on the messages rather than all participants reflected on all artefacts. However, this arrangement did not affect the main purpose of the study because the study seeks to understand the framing of the triggering messages, not the framing of the artefacts. Another important aspect was the participants' anonymity. One of the participants was a bit careful when sharing her opinion with the researcher at the beginning of the interviews during the pre-message phase. The participant was worried if her comments would jeopardise her career. So, the participant asked whether or not the researcher was representing the ministry. However, after the participant was assured that the researcher conducted the study independently as a Ph.D. student, an academic from local University and a parent of a dyslexic child, the participant became more relaxed and comfortable for the interviews. Besides, in order to ensure that the participants were happy with and approved the data collected, the summary of the findings was informed to the participants before the researcher could use any excerpts from the interviews to support the findings. The participants were also ensured that their identities remained anonymous at any stage of data reproduction. The participants were coded as R1 to R15, and their real identities remain confidential.

Taylor and Pagliari (2018) examined seven multi-disciplinary ethics guidelines for social media data mining in the UK and found that there are four relevant guidelines for UK researchers. All four guidelines referred to social media as research tools, 3 of 4 refers as source of data; 2 of 4 as source of channel for scientific discussion; and 2 of 4 as means of public engagement. These guidelines 'prioritised privacy, differences between digital and conventional research, informed consent, approval/regulation and researcher lurking' (p. 24). With regards to the guidelines, this study utilised social media for three of the above purposes except for as means of public engagement. The main purpose of the use of social media was as the data collection tool, where interviews were carried out to identify the participants' background knowledge about dyslexia as well as the participants' reflections on the viewed artefacts. The ethical guidelines have been observed of which the participants' informed consent were sought prior to the start of the data collection; and the participants' privacy has been prioritised. The participants' personal information was not revealed and kept in University of Southampton PC which is encrypted and only the researcher has access to it. Although the participants' discussion in their Facebook closed group have been observed, the researcher's intention has been announced and approved by all members. In fact, prior to the discussions, both research assistants [the moderators] revealed that the discussion on the topic posted by them will be observed by a colleague who seek to understand the issues linger around the LINUS programme and inclusive education policy for

students with SpLD. Hence, the participants were aware of the data mining from their social media discussion. Besides, the participants were informed that they could request to be excluded as the participants. Another ethical management observed by the researcher in this study which was not highlighted in the recommended guidelines for the UK researchers by Taylor and Pagliari (2018) was the participants' approval for the finding publication. Prior to the publication of the findings of the study, the summary of the findings was revealed to the participants. The participants were given the authority to agree or disagree with how the findings were presented.

Compared to the UK, Malaysian ethics approval mainly focusses on the issue sensitivity and the permission to enter the data collection premises (Aida et al. 2019). Since the data for this study was collected via instant messaging interviews, the researcher was not required to enter any government premises or schools to collect data. Hence, ethics approval was not required. The only ethics consideration needed from the Malaysian government was basically to inform the government about the research. This was obligatory to ensure that the sensitive issues that may disturb the country's social and political harmony are avoided. For this purpose, the researcher was required to send the research proposal to the Malaysian Government's Economic and Planning Unit.

Chapter 4: Finding Analysis: Dyslexia Awareness

The presentation of the findings in this chapter addresses the first research question of the study - what is the level of dyslexia awareness among Malaysian primary school teachers?

In order to understand how the Malaysian teachers at the mainstream primary school in the study learn about dyslexia via online Teacher Professional Development (oTPD), the researcher believes that the teachers' current understanding of dyslexia needs to be demarcated. This is to ensure that the selected artefacts used in the message framing study later are relevant to trigger the teachers learning about dyslexia. This phase is called pre-message framing.

Malaysia introduced a provision for literacy and numeracy screening known as LINUS. Hence, in the following presentation of findings, the participants [who are teachers at mainstream schools all over Malaysia] shared their experience and perceptions of the LINUS programme. The teachers' understanding of dyslexia early identification had been interpreted via their Facebook [FB] discussion on LINUS programme. In order to understand the teachers' conception of dyslexia, further individual interviews were conducted.

Disclaimer: The term dyslexia is employed throughout the thesis because the researcher embraces neurodiversity framework in the study. One of the fundamental principles of neurodiversity framework is to raise the public awareness that being dyslexic is not a bad thing but unique.

4.1 Findings from the Observations of Facebook Group Discussions

On the day RA^a posted the statements related to LINUS, eleven teachers [11] responded in a total of seventy-three [73] reply threads. The discussion continued the next day with thirteen [13] teachers participated - nine [9] new participants and four [4] previous participants with a total of one hundred thirty-six [136] reply threads. RA^a received responses from 20 colleagues with a total of one hundred thirty-six [136] reply threads. RA^b received responses from 6 colleagues with a total of one hundred twenty-eight [28] reply threads. In total, there were twenty-six teachers [coded as T¹ to T²⁶] responded to the FB group discussion; and fifteen teachers participated in the WhatsApp instant messaging in-depth interviews.

The FB postings were done twice. The first post consisted of questions related to teachers' experience and perception in implementing LINUS. The second post consisted of questions related to the teachers' dyslexia awareness.

4.1.1 The Teachers' View on Literacy and Numeracy Screening

RA^a's first post on her FB wall:

"Good morning...today, I would like to post an academic statement since more than half of my friends on the list are teachers... hope you could spare bit of your time to respond to the following questions. Those who rarely respond or comment my post are also welcome to give their own opinion..."

- 1. Do you enjoy conducting LINUS? Why?*
- 2. Have students show improvement after the LINUS programme?*
 - a. In your opinion, what is contributing towards the improvement?*
 - b. If a student fails to show an increase in what is the cause?*
- 3. How can students improve (I couldn't find Malay word for improve 😊) in all these three skills?*

I thank you all in advanced and love you 😊."

All 26 teachers responded to the post agreed that LINUS is beneficial in helping teachers to understand students' ability but disagreed with the implementation. They agreed that LINUS is important as it helps teachers to identify the students' abilities to read, write, and count [known as 3M – an acronym that is known by every teacher in Malaysia]. However, the teachers claimed that the implication of LINUS programme is bad.

According to T³, students did not enjoy the learning process as they are being forced to meet the high expectation set in LINUS programme. T³ believed that as long as year 1, 2, and 3 students are able to spell, and read simple sentences, they are considered to have good basic literacy skills pertinent to their age.

T³: "With the new primary school system nowadays, it is important that teachers know how to identify 3M abilities as early as year 1. But, personally, I disagree. Students should be enjoying learning and enjoying being in school and not be forced to pass the screening. The basic abilities to spell, read simple sentences for the first three years of schooling."

T³'s used the word 'forced' to manifest the teachers' efforts [drilling practice] to help the students to master the literacy skill. For the LINUS programme, the students are expected to pass at least the first two constructs. In order to help the teachers to prepare the students, the Ministry of Education has prepared modules containing the twelve constructs. In contrast, T², T⁴, and T¹⁴ found the modules to be helpful for them to use for drilling students to master the skills according to the constructs.

T²: "We can use the modules to drill students by constructs. LINUS programme has the best modules... If your students have problems with literacy, send them for LINUS remedial class."

T⁴: *"LINUS programme has prepared the best modules... if parents can give additional assistance at home, it is even better."*

T¹⁴: *"A drilling I guest (T¹⁴ means 'guess'). Drilling, work hard and smart."*

It is vital to restate that Malaysia is currently reforming its education policy via an Education transformation plan that takes place from 2013 to 2025. Besides attending the teachers' professional developments [TPD] for LINUS, the teachers reported that they attended several TPDs in the preparation of implementing inclusive education too. The teachers were empowered to decide on the best pedagogical content and approach they think would work on the implementation of the inclusive education system; a collaboration which Kellsey and Taylor (2016) mentioned as "involving shared responsibility for resources and outcomes" (p.6). Hence, the supports are commonly given to teachers to focus heavily on pedagogical knowledge (Elmore, 2002). The TPD has become the platform for the teachers to collaborate on the project of developing lesson materials:

T²⁷: *"We focus on 21st-century teaching and learning approach...collaborative... all sorts. The collaboration is more on preparing materials."*

Although the teachers managed to compile teaching materials and brought the teaching materials back to respective schools, the teachers felt that they need to be taught on how to teach in an inclusive system – not to produce teaching materials. Such TPD that focus on pedagogical content is classified as a transmissive PD (Kennedy 2005).

T²⁷: *"For me, they should focus on methodology. And knowledge sharing on how to deliver, how to manage, how to be teachers. Build confidence in pupils. For me, the people in the sky* should provide the materials... the guidelines to carry out that methods in teaching."*

[* refers to the superiors such as the education officers from the district education office, the state education office and the ministry].

TPD that focuses on the transmissive model accentuates on 'consequential accountability' and is mostly evaluated via tests and teachers' teaching performance (Kennedy 2005). Majority of the teachers complained about the number of works piled onto teachers' current workload especially on conducting the individual test; managing the big-sized classroom during the test; conducting the remedial programme, and reporting the students' progress.

T¹⁴: *"LINUS is a stress work."*

T²⁷: *"It's not that we want to stream the students who are illiterate... but if we do streaming... we can focus more...the class size is too big."*

The worst was when the teachers were supervised and ‘forced’ by their superiors to produce good results. The screening test results have become an instrument to evaluate the effectiveness of the programme - “*LINUS is good, but when it has become the teachers’ KPI (Key Performance Indicators)... (T⁷)*”, this practice had led to its worst outcome when “*teachers started to cheat in the report (T⁷ and T²⁷)*”. The dissatisfaction with the superiors (especially the district education officer-in-charge) was clearly expressed by the majority of teachers.

T²⁸: *‘The head teacher had to push us because the officers kept pushing the head teacher. They (the officer) do not care’.*

RA^b second posting on her FB wall said:

*“Academic postings... 🤔🤔🤔🤔
many of my friends here are teachers...kindergarten teachers...nursery teachers...remedial teachers, right? So I would like to ask a bit. Do you feel that teachers could identify learners’ ability as early as they are in kindergarten...I mean if they can read or not...if the learners are identified illiterate...what do you do so that they can master 3M*? Please respond ya...
#2017teachlinusagain
#mreducationofficer’sorder
#sharingiscaring..
#iamstilllearning”*

At the bottom of her FB post, RA^b wrote a few hashtags (the way people in social media illustrates trending topics):

‘#2017teachlinusagain’ and ‘#mreducationofficer’sorder’.

Both ‘#’ orient to disagreement on LINUS implementation. The statements indicate that RA^b was not happy with the implementation of LINUS. Her dissatisfaction was proven when she commented that the officers regarded the LINUS program as their ‘key performance indicator.’

The findings suggest that the teachers believed that overall, LINUS is a good programme. It helps to identify students with lower ability to read, spell, and count. However, the teachers disagreed that the students’ attainments in LINUS should be made a benchmark of the teachers’ effort and ability to teach.

4.1.2 The teachers’ View on Intervention for LINUS Students

Students who failed in LINUS test are sent for a remedial programme. These students were called LINUS students. Majority of the teachers said that they were able to identify students who were below the national education literacy expectation. The teachers also agreed that they were able

to identify students with learning disabilities. Nonetheless, the teachers admitted that they did not receive any formal training on special need education. Thus, they could only use their common sense to identify learning disabilities. Indirectly, when the teachers felt that they lack training, the teachers lacked confidence to teach students with learning disabilities.

T¹⁰: *The special need teachers should be accountable to teach these special need students*

T¹²: *What if the students have multiple learning disabilities? We definitely can't teach them.*

However, the teachers are comfortable with the integration education system implemented before the inclusive education system is introduced. In the integration education system, students with special needs attend mainstream school but learn in a dedicated class for students with special needs. Should there be any programme that requires the teachers to teach the students with special needs, a special need teacher will accompany them.

T¹⁵: *We can if there is a special coach.*

When T¹⁵ talked about the 'special coach,' T¹⁵ was reflecting the time when he experienced a problem which involved students with a physical learning disability [deaf]. T¹⁵ was not confident because T¹⁵ did not know sign language. This shows that T¹⁵'s definition of learning disability was dominated by physical disability.

T¹⁵: *Like the teacher who specialises with a hearing problem. The teacher can sit next to the student.*

The association of dyslexia [learning difficulty] with a disability is also supported by the teachers' scepticism with the dyslexics' ability to learn with the so-called 'normal students.'

T¹⁷: *They can do vocay (vocational education). I have a case this year – twins. One can read, one is dyslexic. It is sad that the parents want the dyslexic twin to stay in mainstream class for the reason that the twins should not be separated. The one who is dyslexic should be in class E (last class – students in Malaysian schools are streamed according to their academic achievement). But the dyslexic was put in a good class together with the twin... the dyslexic show very little improvement 2%".*

Generally, the teachers were aware of dyslexia, but their conceptual understanding of dyslexia was limited. T¹⁶ asked RA to define what dyslexia was and was told by T¹² to google the meaning (as in the picture). T¹⁶ came out with the definition which was translated into the English language as *"Dyslexia is a disturbance in reading and writing. Dyslexia has always been regarded as a disturbance in reading, but the condition actually affects the ability to write too. In other words, it affects learning, not only reading.*

(<https://www.docdoc.com/id/info/condition/disleksia/>)



There was also an instance when T⁶, who has a dyslexic child mentioned about dyscalculia and dysgraphia. T⁵, who did not know what dyscalculia and dysgraphia are, was asked to find the definition online. This shows that some teachers who know about dyslexia learn about dyslexia informally such as by 'googling' the information. Hence, it shows that online TPD could offer the teachers a formal education on dyslexia that could guide the teachers to search for more credible information on dyslexia.

4.2 Findings from WhatsApp Instant Messaging In-depth Interview

The analysis of the findings from the FB-group-discussion observations revealed that the teachers in the study acknowledged dyslexia existence. However, the teachers' awareness of dyslexia was limited. There was also evidence of learning disabilities and learning difficulties misconceptions. The initial findings from the FB-group-discussion observations led to the generation of in-depth interview questions. The following are the three sets of interview protocol determined for the in-depth interview questions:

- i. The teachers' perception of dyslexia's problem and educability.
- ii. The teachers' perception of dyslexia identification.
- iii. The teachers' perception of dyslexia intervention.

Fifteen teachers were approached individually for interviews. The respondents were coded as R1, R2, R3, R4, R6, R7, R8, R9, R10, R11, R12, R13, R14, and R15.

4.2.1 The Teachers' Perception of Dyslexia's Problem and Educability.

Most teachers in this study associated dyslexia with writing reversed letters.

R7: I don't realise that some students who write reversing letters were a type of learning disability until a senior teacher told me. After that, I start to pay attention to these students

According to R13 who was a remedial teacher,

In Malaysia, we don't have severe dyslexia cases. Our dyslexics only have problems with reversed letters writing.

R4, R5, R6, R9 and R14 believed that the students with dyslexia are 'special,' thus need to be given special need education.

R14: They are special. God bless these kinds of children. We have a school for dyslexia. The students were better off there because the teachers are well trained with special needs. They got a disability allowance too.

R4: *That's why once we've recognised the children as dyslexics, we should send them to special need school. Mainstream teachers cannot do it. Maybe because it's not our area...yup...not all teachers can handle students like this.*

R6: *Dyslexia doesn't sound like an important issue, right? But the worse one must be sent to special need school. They might sound okay when they read, but actually, if you check, there are many mistakes. They like to add up words.*

R5: *Then there is a special need college for students who hold the disabled card.*

R9: *They can do a lot of things if they were a given chance (special education).*

Unfortunately, R3, R4, and R15 believed that some parents were upset when they were told that their children have problems with learning. They refused to send their children to special need school. The teachers have an idea that students with special needs are educable, but mainstream education is not suitable for the students with special needs.

R3: *Unfortunately, there are parents who can't accept that their children are special.*

R4: *There was a time. Parents got furious when we told them about their child's problem. And we asked them to take their child for medical. The parents said you are saying that my child stupid?? My child is retarded?? Parents' mentality. They thought when we said about special need schools, and we were saying that their child is a disabled.*

R15: *When they told that my child has learning difficulty, at that time, I immediately understood how these parents feel.*

R1, R2, and R5 believed that dyslexic students could also benefit vocational schools because vocational schools offer less academic subjects, unlike the mainstream schools.

R1: *To me, vocational school may be good for dyslexics but not the art school. The art school focus on academic too as much as the art subjects. But the vocational school I think is needed. Because sometimes they can't excel in academics, but they do well with hands-on skills.*

R2: *We really need a vocational school for students like this. They will feel more appreciated.*

Although R6 believed that severe dyslexics should be sent to special need school, R6 believed that mild dyslexic is not a type of learning disability but rather a bad writing habit. Similarly, R9 believed that penmanship could be one of the reasons why the students could not write well. Hence, they were of the opinion that teachers are required to be aware of this bad habit and make sure that the students are corrected at an early age.

R6: *Don't get it wrong. Teachers just need to be patient. We need to tell them to write properly. In the long run, they will not write reversed letters anymore. If you didn't correct them when they were in primary school, they will carry the bad habit when they enter secondary school.*

R9: *The reason is lack of penmanship. We should teach them penmanship*

R2 also realised that there were other causes for reversed letters writing such as eyes problem. R2 compared two of her LINUS students.

R2: But I don't think the other one is dyslexic. He is overall ok, but he does write reversed letters. May be a problem with his eyes only like my nephew. It's true. Writing reversed letters can be linked to eyes too, especially if the kid had a fall with his head first.

Despite the teachers' belief on whether or not dyslexia is a learning problem, R6 and R9 believed that dyslexia could be cured.

R6: Yes, dyslexia can be cured. Don't get it wrong.

R9: We have to drill them. Normally, when they follow the remediation programme, they will be okay. Then they can join their other friends at the mainstream classes.

4.2.2 The Teachers' Perception of Literacy and Numeracy Skills Identification

Undoubtedly, LINUS is a great literacy identification and intervention programme that help the teachers to identify their students' literacy and numeracy skills. Nonetheless, the teachers believed that even without LINUS, they manage to identify their students' problems and teach the students based on their needs. The teachers regard the LINUS programme as an additional burden.

R8 : When linus was introduced, I start teaching so exciting listening. Then the JU, now they were called linus faci [facilitator], told that linus is reading problems remedy for students. So like differentiation, they said. So we asked, isn't PBS a differentiation; and why if we have differentiation we need another screening and still conducting exam? And when we teach in class we have already done differentiation, right? so why do we need screening? Then we asked about teaching time because we don't have any remedial teachers for English so how do majority English teachers who didn't attend remedial edu course teach a remedial class (not differentiated activities) and mainstream class at the same time. They just answered 'we just follow the order' (This is a common cliché among government servant to express inflexibility).

R2 declared that LINUS programme is useless as feedback on the screening is not available.

R2: The funniest thing is...there is no feedback on the screening itself and the items. Teachers are not allowed to share the reading or writing instruments. Even pupils don't know their errors or mistakes. We just have to key in the data

The Facebook focus group discussion indicated that 25 of 26 teachers were frustrated with the programme. Further interviews with the teachers in the study revealed that the teachers' frustration level was high. R1, R2, R4, R5, R6, R8, R9 and R15 elaborated their frustrations towards the programme.

R2: Linus is actually good, but the terms and condition they put into executing it are ridiculous.

R4: The prog (programme) was a very good prog. Bcoz it will give exact data about our pupils. But it is a sad prog, a disaster. We (my colleagues and I) if mention about LINUS is like mentioning about a cheating husband 😞. We get angry. We get instantly emotional.

R4's analogy of "cheating husband" indicated that the LINUS as discussion topic is as hot as cheating husband topic that drives women in the conversation angry. To further understand the flow of the programme, R5 and R13 gave their explanation.

R5: LINUS focus more on helping students whom x grasp the basic 3m skill (membaca –read; menulis- write, mengira – count). If the students pass (the next test) ... (that means) the student has met the programme's objective. Normally after year 3..., the student will go to a mainstream class. The remedial teacher will make a report on students who don't meet the basic skills expectation. If there is a need...the remedial teacher will refer to SEN Officer at the District Education Office. Students will go to the mainstream class as usual. X more remedial at stage 2 (year 4 to year 6).

R13: When the students could not master the first and the second construct, they will be recommended to go to a special need school via outreach programme. The outreach programme identifies

- 1. students with learning difficulties*
- 2. students with hearing problems*
- 3. students with visual problems*
- 4. Dyslexia*

There are two ways

- 1. Direct reference. Students will be taken to a hospital.*
- 2. Group reference. Doctors, Welfare Department, National Bank, come to a place (one-stop centre) and assist students with learning disabilities to register as disable and create a bank account (for allowance).*

The teachers believed that some of the MOE's programmes, including LINUS, are not realistic.

R8: They (MOE) talk big but not sure implementation as big as the talk huhu.

R5: Too ambitious to be achieved.


One of the reasons is that the policymakers who created the policy and the programmes are those who are not involved in teaching primary or secondary schools. Although the education officers [before being promoted to their current positions] may have taught in schools, their experience is outdated. Hence, from the teachers' point of views, the policymakers' decisions were not informed by reality.

R5: They trust their expert opinion, so to say. When actually, the one who did the policy is the professor from other section... not related to early childhood education or primary school or secondary school. Those involved are the university lecturers and education officers who don't teach.

R8: Policymakers should be aware of who exactly will implement these policies and meet with those who will implement the policies. Because I think there is a sort of 'gap' between policymakers and those who will implement the policy...

In addition, the Malaysian top-down and highly centralised administrative style has made it even worse.

R8: When we tell them, we did say something, one senior tcher raised the HOTS issue in a textbook before this, and she's been bashed – the one who made this textbook is Ph.D.

holder. Then we were like  . Not to blame the Ph.D. but the person who says that. So yeah, in msia, take EVERYTHING with a pinch of salt. Or a bag of salt. Hihihih

Interviewer: Highly authoritarian?

R8: Totalitarian more like it.

R1: Teachers are pressured by the head teacher... the head teacher is pressured by the DOE

In fact, R8 sarcastically mentioned that the policymakers created the new policy or programmes for their own personal agenda:

R8: Not to mention their projects which only to give them credits etc. or for their program or further study (no offence) that involved all of us which in the end abolished or xknow the directions.

R1: We've heard about the talks on teachers' workloads research like 10 years ago... only research all the time...

The teachers complained that their current workload is heavy. Not only that the teachers were assigned to teach but also they were assigned to do administrative and clerical works. Hence, the teachers viewed additional programmes, especially those redundant as burdens that hinder teachers and students' bonding time.

R8: Do you know the amount of admin work that t's had to do that obviously disturb teaching and learning in class but people in MOE, sed or deo xbelieve and accused t's complain a lot...we hold several posts like Secretary for curricular, Secretary for subject panels, SKPMG clerical work, key-in online marks, marking exam papers (5 classes = 150 papers and some of my colleague teach 9 classes of diff subjects) and whatever clerical work that takes our time and focus. We don't even have times to prepare teaching materials.... Let alone to have times with the kids.

R1: In Malaysia... teachers get angry because of that laa... too exam oriented, target oriented... we can't enjoy singing in class. They should reduce teacher's workloads... but impossible...I am now working on a management budget for 2018. This is administrative work... to cry or to laugh I don't know... till I didn't get to do my lesson plan. Then it was ok... cos I only teach 7 and contact 8 hours only. Now... from year 1 to 6 all 10 contact hours. There are only 2 English teachers, including me. The data teacher got max 12 hours. There so many data. Last time I was awarded as the best data manager in our district... so you can imagine how I work... I always abandoned my classes. I don't know... job as teachers here is stressful.

R5: Work factors around teachers are very discouraging.

R6: Teachers nowadays have a lot to do... feel like retiring early hehe...

R14: Clerical workloads are more than teaching workloads. Teachers should teach according to their expertise...not teach just anything...reduce unnecessary

subjects...timetable system should also be revamped... so many more...I'm just too tired to think.

The teachers viewed big-sized class as another hindrance for them to pay attention to their students. This includes problem to mark students' works, identify the students' weaknesses, and provide the right support for the students.

R9: This year, I teach 38 students in a class. Some still write letter S in reversed order. Till today I x recognise the child. Moreover, I enter the class once a week... when we have fewer students in the class, we can pay attention to all...

R2: I have once taught 48 students in a class. I also have 25 and 11 students. Easier to teach the 25 and 11. I pity the one with 48. Sometimes I x check their in-class exercises. (I) can see when I mark their works. Marking is very important, and we need to give feedback to the students fast so they won't repeat the same mistakes.

R4: There are 18 topics for year 2 English subject

R1: We can be flexible if we have more time...

Those teaching in remote areas such as R10 who teaches at one indigenous village is more likely to enjoy teaching small-size classes. R10 agreed that having less number of students enable him to know each of his students.

R10: Teaching at school in a remote area with the number of students, about 10 in a class give me a chance to know my students better. Each student is unique. Different problem, different solution. I found them learn in unique ways.

Not only that the class size is big, the teachers believed that the issue of lack of teaching manpower in rural areas need to be resolved before other programmes are loaded on the teachers' responsibilities.

R8: My school lack of 7 math teacher there are only 3 teachers for 500+ students population murid so difficult to do linus, and bm linus and math are for year 3, english linus for year 1-3. Again, i'm not complaining just telling you the bitter reality.

For every programme conducted, the teachers are required to prepare an online report.

Nonetheless, the Ministry of Education [MoE] data server was reported to be less efficient.

R6: Everything should go online everything they want fast...

R8: Trust me, MoE server is extremely slow that I can cook instant noodle and eat, and still x can't enter the online 12-construct thingy system for each student, and the DOE officer had the cheeks to tell us to wake up in the middle of the night or before dawn or before dusk to key in the data.

The teachers reported that there are falsifications of LINUS data activity, and the teachers were extremely unhappy with it.

R4: Teachers tried to conduct the test honestly. If x achieved certain constructs...teachers will put the remark not achieved...But....the DoE people said... Push harder teachers...give them answer whatever as long as the LINUS kpi achieved. Get it? Hahaha. That was the reality Haah...everything is teachers' fault... x client 😊.

R5: That's true. It is the same in my school. Sometimes I wonder...do these people know that all these data are falsified. Everything is plastic. The head teacher and DoE officers x want to answer... so need to fill in as achieved or mastered... otherwise... an officer will definitely come down. Head teachers in most school will tell teachers the responsible teachers... do report but make sure no officer will come down. The reality is... the officer came not to find why... not to solve the problem but more on finding teachers' faults and weaknesses. Why the students x achieve. Because to them... their module and all given are perfectly complete. Then the teachers will be brainwashed. The head teacher, too because the teachers x perform and achieve the kpi. The teachers may even be sent for training again. And the training content is the same. In the end, the teachers are stressed.

*R8: Imagine, our DoE officer asks us to give a pass to linus students during the linus screening regardless of ok or not because they want to maintain as DoE*linus no 1 It's their word, Ayat depa, maintain the DoE reputation at the SED (state level). They did ask us to cheat because if there are linus year 4 students under their department, the SED people will inquire them why the students fail.*

While it was difficult to convince the Department of Education [DoE], R9, R4, and R8 agreed that the DoE officers accepted the possibilities of learning disabilities. Yet, the amount of work to report for further investigation was a lot.

R9: I remembered I had raised my voice to the officer because they don't believe that 3 of my students can't read and illiterate. Moreover, I teach English. They asked me to give them a pass at least band 3. I asked the officer to come over. Now those 3 students are 12 years old and were diagnosed with learning disabilities. They are now in special needs.

R4: They will recommend the teachers to refer the students to the specialist like what (the procedure) we have now. But the procedure is quite a hassle. Teachers need to fill up some questionnaire before the students could be sent to the hospital.

R8: And after that need to do justification for the the students who fail LINUS programme. That is fine if we only do linus. You should have seen the tonnes of papers wasted on these linus report thingy, justifications, linus file from each subject panel, main linus file, etc.

What made the teachers angry was, perchance, the treatment they received from the officers responsible for monitoring the implementation of the LINUS programme. In spite of respecting the teachers' autonomy, the teachers were put to blame for the students' failure.

R8: In paper and talks, they said they give teachers the autonomy. Then burden us with their projects too. Then they said teachers are problematic and the reason why students x perform in EXAMS.

R8: Our govt talks about thinking out of the box, but all of them are empty talks, why did i say this, bcos they still shove what they think is best for students down our (teachers) throat

rather than respecting what we do in class according to our student's ability. And in the end, they still assess the teachers teaching ability via summative tests.

The conversation between R1 and R4 below showed the teachers' frustration when the DoE officers blamed them for the students' failure:

R4: LINUS cause mental distress. Hahaha. The facilitator will announce your schools' name. Why are there so many students fail the test...can't the teachers help to 'push' them to pass (the test)?

R4: Do they think we should instil short-term memory? 'Push' at that time... force (the students)...of course, they can pass (the test). Give (the students) the test again the next day... I can guarantee they will forget 😊

R1: 😊

R4: In the end... LINUS doesn't bring any good. Those who can't (read) was made to be (able to read). Then the data look good when it arrives at the MoE.

R1: Because of the 'pushing' things, we couldn't really know whether or not the students are a dyslexic or slow reader.

R4: Just now, the facilitator asked if I can give a pass for the two students.

R1: Let them teach

R4: How can that be? I can't even understand what the students are trying to say. I'm pissed off when they said they were also teachers once. They know that there are always ways to make the students able to read. Well if that so...better not to do any screening.

The teachers' frustration with LINUS programme affect the R6 and R8's confidence with the MoE's literacy and numeracy screening programme.

R6: x know until when they want to implement this LINUS programme. I use my own way. X follow the module as long as the children can read.

R8: But now I just cruise pass it cos I know all these x lasts anyway. Just do it, if I can't do it, relax, if I have to do it, take it as a learning experience.

Note: LINUS programme ceased to operate since January 2019.

4.2.3 The Teachers' Understanding of Dyslexia Learning Intervention

Although the teachers were frustrated with the implementation of LINUS programme and perceived the programme as redundant screening programme, the teachers believed that LINUS enables the teachers to provide remediation for students whose skills are below the national standard. Not only that the programme facilitates the identification process, but also the intervention programmes, specifically the teaching and learning. The teachers asserted that during LINUS training, the teachers were asked to prepare teaching materials for the programme.

R4: (We were trained on) Teaching method a bit. When I attend the LINUS course, we are not taught to identify problems but we are asked to do lesson plans complete with the teaching aids everything, and then we take a turn to present them in front (of the participants).

The teaching materials were then compiled, disseminated, and shared among teachers. The compilation of teaching materials from several workshops conducted was used as resources for teaching materials. Hence, there are loads of lesson plans and teaching materials for teachers to utilise. One of the advantages of having a huge amount of teaching resources is that they can be used to drill students to master the content. The more materials the teachers have, the better the drilling would be.

R9: I like it because there are a lot of materials available so I can use to drill the students.

The teachers also affirmed that they were encouraged to incorporate ICT into their teaching. In fact, the ministry had invested a lot in incorporating ICT in teaching and learning. The teachers perceived the ICT provisions as wasteful to certain extent as proven in the conversation between R4 and R5 below. [Note: Most interviews were conducted individually. However, there are some occasions where the researcher blasts a message in the WhatsApp group; some participants were online at the same time. Hence, the participants exchanged their opinions via the group conversation].

R5: To me... the mobile phone gift is like a waste. The budget used to buy teachers phone can be used for other things... it's just a few gigs... not enough to use as teaching aids.

R4:: True...the mobile data ends quickly...hahahhaa....everything to be filled up in that free handphone...attendance...update saps...update everything-e using that free handphone

R4: I agree with R5...better give the budget to class teacher..or add to the subject panels' budget

R5: VLE frog is another... 😊 small on top of it. Only the teachers could benefit it. Better give us big screen... provide facilities that the students can benefit. Not that I do not contend but yeah... the mobile phone price is rm399. Even the teachers' phone is more sophisticated. Can be used to teach the students.

Yet, all teachers agreed that ICT makes learning more interesting. R10 who recorded his students on videos said that the ICT is an innate interest of Gen Z. Therefore, it can make the students engage better with the lesson.

R10: First of all my intention was to make them engage in my lesson (of course for the sake of English), then for Icip, I don't want him left behind among his friends. For me, ICT is something innate that every GenZ has. They are born with that talent. You name any game, even the weakest student able to master it in a split second. They know all apps so well. That's why I use video as a motivation for Icip to comprehend English in a fun way. I reckoned it could help Icip to catch up with his friends and the result was amazing! At the same time, it really increased the school attendance percentage each month.

R14 (a remedial teacher), when asked about the advantage of using ICT, did not view these provisions as great facilities for multi-sensory learning that enable students with different learning abilities to learn in an inclusive classroom but rather as an attraction.

Interviewer: Why should teachers use ICT in their teaching?

R14: Because it makes the lessons more interesting.

Interviewer: Other reasons?

R14: Students like it because yup... more interesting. Different materials. They can see pictures, videos. We also use real objects.

Despite the teachers' ability to teach the students according to their abilities, the teachers were a bit sceptical of teaching students with learning difficulties together with 'normal students.'

R1: Dyslexics in the same class with ordinary students... to focus on each group is quite difficult especially when there are 40 students in a class

R5: But if they go to special needs... the teachers will teach based on the students' development. No syllabus to catch. One class max 5 students.

However, R6 and R15, neither complained nor agreed with LINUS taking control over the programme. R6, for example, did not follow the LINUS modules. In R6's opinion, every teacher cares about the students and has their own way of helping students learn how to read.

R6: LINUS is meant for year 1-3. In year 4 (if they still can't read) they end up in remedial class. There are many ways we can help the students like this. ..Teachers have their own ways...doesn't matter. If the MOE module not suitable for our students, we should know what to do as long as the students can master this basic skill.

It is important to note that R6 said in the Malay language [the original interview script], "*ti msuk klas pemulihn je...*" which is translated as "*they can go to the remedial class.*" The discourse of the expression [*in the first language*] means "all that the teachers can do for these children is to send them to remedial classes." This shows that the teachers did not see the need for LINUS programme after the students have been identified to join the remedial programme, which does not cater for those with learning difficulties. This is because, according to the teachers, there are gaps between the remedial and the mainstream programme. The teachers believed that the gap between the syllabuses taught in remedial classes and mainstream classes suppresses the LINUS students. The LINUS students will go to remedial classes for literacy and/or numeracy during language [Bahasa, English, and mathematics] periods.

According to the teachers, when the students sit for examinations, the LINUS students will have to answer similar exam questions provided to non-LINUS students which are of the higher syllabus. The teachers believed that it is unfair to measure the LINUS students' progress as they are tested with skills that are not taught to them. Hence, the teachers did not see the relevance of providing remedial classes to LINUS students when the syllabus taught in remedial classes is lower than the mainstream classes. However, as the syllabus taught in remedial classes is lower than the mainstream classes, the LINUS students to be left further behind other students. Not only that the

students are left behind the languages and/or mathematics subjects compared to their cohorts, but also other content subjects that require them to read to understand the content such as history, science, and religious subjects. R8 explained that the syllabus, the module, the activities, and the evaluations between the remedial and the mainstream programme were not tally.

R8: an exam which is NOT valid in the 1st place (think of linus student need to answer questions meant for mainstream students) blabla. The module for L s's doesn't tally (in terms of topics/obj) with non-L s's' activity books; plus all s's sat for summative tests/exams where the q's are tailored only for non-L s's. So in class, we can do a lot - sing, dance, dramas, arts, crafts, etc. But, the setback would come when these s's that ace in VAK-based activities had to sit for exams, they'll fail.

R15, who is also a mother of a child with a specific learning difficulty, rather than complaining, chose to act against the programme.

R15: I took her (her child who learn at the same school she is teaching) out from the remedial class as she became left out a lot.

R15 also had taken a step further in providing supports to parents of LINUS students.

R5: I love sharing my experience managing my daughter with other parents/ cos only those who experienced and have children like this know how to manage their children. I was a LINUS coordinator, and I gave talks to year 1 parents. In fact, my head teacher encouraged me to give talks to parents about LINUS and special needs. Now I am no longer the coordinator.

4.3 Interpretation

In this section, the inductive process from the findings to the emerging themes is discussed. The findings revealed that the participants were aware of the existence of dyslexia. However, the participants' awareness did not reach meta-awareness level. As the researcher explained earlier in 2.4.4, the review of previous literature indicated that the notion of meta-awareness is utilised interchangeably with meta-cognition. However, several studies reported that the affective component of awareness plays a crucial role in stimulating active learning (Novak 2002; Picard et al. 2004; Kormos and Nijakowska 2017). As Picard et al. (2004) explained, the affective presence of the studied animations in their research notify the participants of the message conveyed and complexly intertwined with cognitive presence to create a path that guides rational behaviour, memory retrieval, decision-making, and creativity. The researcher interpreted that there are two parts of awareness: cognitive and affective. The process of intertwining cognitive and affective component of a message creates a synergy that forms meta-awareness; not cognition nor affective alone. When the messages conveyed were unable to stimulate the participants' meta-awareness, the participants do not undergo the sense-making process (Weick et al. 2005) which

later promote active learning (Garrison et al. 2001; Weick et al. 2005). Hence, the participants did not realise the importance of LINUS programme for dyslexia early identification purpose. The above-mentioned interpretation of findings suggested that the participants lack information about dyslexia identification [the first emerging theme].

Basically, the participants associated dyslexia with writing reversed letters symptom. The findings concur with Ghani and Ahmad (2011) who claim that dyslexic students, although categorised as students with learning difficulties, can learn standard curriculum – they are only confused with letters. The teachers in this study believed that dyslexia as either a problem with bad writing habit or a problem with a learning disability. The participants who comprehended dyslexia as a habit, foresee that dyslexics can be cured by proper training, hence not a serious problem. While the participants who perceived dyslexia as a learning problem were of the opinion that dyslexics are people with disabilities, hence can only be helped by trained teachers. These findings indicated that the participants' conceptual understanding of dyslexia were limited; the current provision to support dyslexia is based on remediation theory –not yet on neurodiversity theory [the second emerging theme].

Dyslexia is not a form of learning disabilities but rather a form of learning difficulties. Therefore, dyslexia cannot be cured. Dyslexics learn in the ways they learn best. The remediation-theory-driven programmes such as LINUS will not do justice for people with dyslexia as the programmes tend to change dyslexics to fit into the education system, which is exclusive for people with common learning traits. The findings show that the effort to change dyslexic's different learning trait (the LINUS programme) to accommodate the current exclusive system has led to frustration and confusion among the participants. The latest literature review indicates that neurodiversity awareness has finally brought medical and educational research into an agreement and leads to a better understanding of inclusive education. Inclusive education focuses on 'fixing' the education system to accommodate the needs of every student, especially students with dyslexia; not on 'fixing' the students to meet the needs of the education system. The findings indicated that the participants understand that students with dyslexia could be 'cured' via support programmes so that they could re-join the mainstream education system, instead of the system should be adjusted so that the students with dyslexia could be accommodated or supported in their learning [the third emerging theme].

The three above-mentioned emerging themes suggested that the artefacts to be selected for the message framing study should contain the information about: dyslexia identification, dyslexia common characteristics, and dyslexia intervention which highlighted the difficulties and differences of people with dyslexia. The selected artefacts should also be able to accommodate

the participants' learning about neurodiversity. An analysis of dyslexia awareness campaign by dyslexia associations, namely British Dyslexia Association [BDA] and International Dyslexia Association [IDA] indicate that the common themes utilised to introduce dyslexia conception are the definition, the characteristics of dyslexia and the spectrum of specific learning difficulties [previously known as dyslexia]. Since the awareness campaign is currently promoting neurodiversity awareness, both BDA and IDA include the positive highlights of dyslexics as one of the most significant criteria of neurodiversity awareness; as well as the dyslexic's ability to learn in the mainstream school setting if the system is changed to accommodate their learning differences.

Chapter 5: Finding Analysis: The Triggering Messages

The presentation of the findings in this chapter addresses the second research question of the study - which message/messages triggered the teachers' awareness and learning about dyslexia?

This chapter presents the findings from the participants' reflection of the three selected artefacts: Dyslexia Explained: Video #1- What's it like Being Dyslexic [V1]; Video #2- Dyslexia: A Hidden Disability [V2]; and Video #3- Tare Zameen Par [V3]. The participants' emotional reflections towards particular scenes, characters, issues, and information were analysed and identified as triggering events. In order to endorse the triggering event, the analysis of the participants' learning process is carried out. The process involves knowledge exploration events, knowledge integration events, and knowledge conclusion (resolution). The triggering event is the stage where learners realised or acknowledged new information. This acknowledgement of new information is considered as triggering if it leads the learners to explore the new knowledge. At the knowledge integration and resolution stages, the learners create their new understanding when the new knowledge and the background knowledge merge. Therefore, the participants' reflections which indicate exploration events, integration events, and resolution events are presented in this chapter as supporting evidence for the identification of the triggering messages.

5.1 The Triggering Messages

In the following section, the participants' reflections which represent the triggering event are presented according to artefacts coded as V1, V2, and V3.

5.1.1 Dyslexia Explained: What's it like Being Dyslexic – Video#1 (V1)

Dyslexia Explained: What's it like Being Dyslexic is a short animation video. This comic tells the story of a kid with dyslexia struggling at school based on the school experience of the CEO of Nessy Learning. Findings in the following section are the reflections from 9 of 15 participants [R2, R3, R4, R7, R8, R9, R10, R11, and R12] who reflected upon particular scenes, characters, issues and information from this artefact. Refer to Appendix I for the excerpts of the participants' reflection analysis.

After viewing V1, R2 and R7 admitted that they felt guilty and sad. The teachers associate themselves with Mr. Teasewell [the teacher character in V1] - R2 reflected on how she had labelled her student as lazy, and R7 reflected on how she used to be angry and fail to overcome the students' problem.

R2: Many of my students showcase the characteristics of dyslexia. At that time xknow anything about this. I would label my students as 'lazybump.'

R7: hai...(expression of frustration like 'arghhh') I fail to overcome the children's problems...huhu (I) only know how to be angry...

Problematic and lazy students are a frequent topic of discussion among teachers in Malaysia. This shows that teachers care about the students and always look for ways to overcome problems. R2, who has been exposed to some SpLD knowledge, gained a new perspective when she participated in a chatting group with teachers from other countries.

R2: Until I met a few foreign teachers in a chat group 10 years ago. They were talking about it when I asked how to help these 'lazy' students.

R2 reflected on her teaching and understood that an overall classroom examination scores might not represent the real performance of the students in her class nor the teacher's teaching performance.

R2: When all but one student perform well. In the heart and mind of a teacher, it was not his/her teaching that is the problem. Well, the truth is not. Sad. Because there are many children, who are dyslexics been marginalised and labelled as 'lazy kid.'

R2 admitted that she has made a mistake for finding solutions without finding out the problems.

R2: It brought me back to my first few years as a novice teacher. I feel guilty and sad a while after watching this. Not exactly (treating them like Mr. TEaswell) but I did label a few students as 'lazybump.' They are genius in certain parts. I prefer to find solutions to the problems rather than finding out the cause of their problems. I was thinking about how many of my ex-students are dyslexic, whom I have actually labelled them as lazy like the teacher in the video.

R10 admitted that he had a misconception about dyslexia before participating in the current study. He was stunned to learn that dyslexia is not about problems with writing.

R10: Yes, exactly! When I always scold the students when looked at their ugly handwritings. The way they write is wrong. Then a senior teacher said that is a symptom of dyslexia. For years, I assume students who have writing problems are dyslexics. That's it, nothing else. But then after I watched that video, of course, it hit me so bad that in reality there are many more symptoms of dyslexia!!! So I gain new knowledge now.

R4 and R11 also felt sad and frustrated. Unlike R2 and R7 who associate themselves with the teacher who fails to recognise the student's problem, R4 and R11 relate their frustration with the current Malaysian education system, socio-cultural and provisions for the students with special needs.

R11: Tom struggled so much in keeping up at school and with homework. He must have been frustrated all the time. Sadly, that happens in mlyisian classrooms. And the blame is not on individuals solely. Many aspects of the whole system of education and socio-cultural contribute to that.

R4: Sad coz M'sia is left far behind in providing a suitable facility for the special need students. As if they were not appreciated. Well, there is but not good enough. Sad to view

from the dyslexic student's perspective. They wanted to succeed, but they need the right guidance to excel... not any facility but what's that...guidance.

R4 also highlighted that teachers are willing to help, but there are other hindrances.

R4: Frustrated also as there is the teacher who wanted to help but because there are other hindrances... so these special needs children are left out.

R3 claimed to feel angry after viewing V1.

R3: I was fuming mad when I watch the video...why is the teacher so stupid xdetect the student's problem...all he knows is scolding...

R3 associated teachers' seniority with negative behaviour. However, R3 quickly justified that problematic students are normally extra active that requires more energy from teachers. Senior teachers are mostly older teachers who are less energetic due to age reason. R3 also associate senior teachers' low motivation as one of the factors contributing to such behaviour. Teachers highlighted similar views on motivation during the interview regarding LINUS implementation earlier. The teachers claimed that they are demotivated with the education system. Hence many teachers look forward to retirement – hence, the negative attitude.

R3: that must be senior teacher...But yup...there are many students in the class... so the teacher xfocus on the kid alone. The senior teacher doesn't have the energy to entertain students like that. Young teachers do. Based on young teachers in my school. Think about retirement only maybe... helpless hahahaha

R3's statement on frustration directed to senior teachers is being supported by R7.

R7: huhu (I) only know how to be angry...

When asked whether R7 is tired with works and became impatient, R7 replied, '*Yes...strongly agree...*'

R3, perhaps, has been holding this frustration even before watching V1. So R3's mind and emotion are fixed to this specific frustrating event.

R3: There's a friend's child... he is in his world...this kid is in year 1...x know how to make friends with his peers... all in his you tube is about dino...he explores... the tab is always in his hand...every toy is about dino...he must want them...his mom is stressful. That was the mistake...they don't take him to see the specialist... There's another friend...her child is diagnosed as dyslexic...they took the child to a psychiatry hospital. The child speaks 1st class English... but no focus... if she doesn't like the class...she will go out as she wishes ...walk around the school...like a school inspector. We, teachers, saw this characteristic in her child... but the mother herself refuses to bring her child for diagnosis...

Perhaps, this issue has been discussed thoroughly with other colleagues. Thus, R3 is confident that the child's problem is related to medical/drugs/hormone pills side effects

R3: she took all kinds of medication to strengthen the womb. The medication can affect the child. She took hormone pills to get pregnant.

R8 was flabbergasted and realised her lack of knowledge about dyslexia.

R8: I feel like how little is my exposure to and knowledge about dyslexia. Dumbfounded and sympathised. Ya, bcos its like dyslexics are struggling, and ppl didnt realize their struggle. Like in one of the video, the boy had to read aloud, and he got scared. It was like. I could be that teacher, you know. Bcos i wasnt aware of him being dyslexic and all 😊

R12, on the other hand, is perplexed '*as the brain of dyslexic works mysteriously.*' R12 was at awe with how the dyslexic boy reacted to the school task and detestation from the teacher, sibling, and friends.

R12: When the boy responded and acted after he was given a task by Mr. Teasewell. The clip shows the boy's struggling to understand and carry out the task given by his teacher. At the same time, he was being criticised by his teacher, sibling, and friends. Perplexed. As the brain of dyslexic works mysteriously.

R10 feels blessed to find out that his new teaching approach has solved one of his student's attendance problem. R10 claimed that his student loves to skip schooling because the previous teacher cares less about the student like Mr. Teasewell, the teacher character in the video. But this year, the student has changed, and his attendance has improved a lot.

R10: Yes! In fact, he is the only one in class who attend school 100% every month, starting in January.

Feeling blessed, R10 emotionally thanked the researcher for inviting him to participate in the project.

R10: Thanks Aida because it feels like I'm fated to be in this group when I'm facing the situation with Icip. X realised that what I've been doing since early this year dealing with dyslexia... it's like I'm writing an essay without a title... now I have a title.

5.1.2 Dyslexia: A Hidden Disability – Video#2 (V2)

Dyslexia: A Hidden Disability is a documentary about children and successful adults who have dyslexia. It features interviews with popular personalities like Steven Spielberg, Charles Schwab, Whoopi Goldberg, Sally Shaywitz, and Craig Watkinson. Findings in the following section are cited from R1, R2, R5, R6, R7, R8, R9, R10, R11 and R15 (10 of 15 participants) who reflected particular scenes, characters, issues and information from this artefact. Refer to Appendix J for the excerpts of the participants' reflection analysis.

From R13 observations as a remedial teacher, learners with learning difficulties will be able to learn if they were trained with learning skills, but their capabilities are limited and never exceed the capabilities of learners without learning difficulties. R13 was stunned when he discovered that successful professional interviewed in V2 are dyslexics. His expression, "*I don't believe that there are successful dyslexics. Definitely can't believe it... that is not a success but a gift*" is the evidence that the new information triggers R13.

R13: I don't believe that there are successful dyslexics. Definitely can't believe it... because learners with learning difficulties normally cannot follow the teaching and learn like other

children... they are slow and continuously left behind. That is the reality. But when they grow older and gain such success... that is not a success but a gift.

R1 and R4 claimed they are emotionally touched for different reasons. R1 recalled her memory teaching a student who could not do well in language subjects but was very good in Mathematics.

R1: It touches me personally... I might not have seen as the case with the student who wrote bananana nanan I told you earlier... I taught him until year 5... he fails English and Malay language... but score A for UPSR maths. He graduated from polytechnic already

R1 feels guilty for not being able to identify her student's problem earlier and limit the chance for the student to succeed.

R1: ... because throughout my teaching years, I might have overlooked or couldn't differentiate between slow learner and dyslexic. Then, if the student is dyslexic... isn't it a teacher's fault ... because if the student is taken care of, he or she might be a successful person now. I do feel guilty because if I failed to identify the dyslexic student... so label them as weak...when he or she has good potential.

R4, on the other hand, was touched because there is an institution that works to support Dyslexic children.

R4: Touching when I see in this video that there is an institution that tries to support these people

Like R4, R10 too reflect on Malaysian school as an institution but in a different manner. R10 specifically highlighted on the 'exam-oriented' system that limits the chances of students with dyslexia and other learning difficulties to showcase their true intelligence.

R10: 😡angry, 😞bored, and 😞sad because the Malaysian education system is still 'exam oriented' although they try to make changes that cost 'millions of ringgit,' maybe it stays like that forever. In the end, teachers can't nurture and facilitate students but teach them to pass the examination. Ironically, the MoE's vision and mission seem to build human, but in reality, people who need a unique way of learning (like dyslexic) remain to be ignored and deal with less importance. They can't showcase their intelligence as chances were only given to 'normal' students

By focusing on examination too much, R10 claimed that teachers and students get less bonding time. As a consequence, teachers are not able to identify the students' problems and determine the best intervention that suited individual student.

R10: So teachers don't get the opportunities to 'know' their students and in fact, do not have time to find the best method/ strategy to help dyslexics.

R10 went on to describe his own learning experience when he was in school back then. He reckoned that he was not a bright student in schools, but he is a bright teacher now.

R10: I was not a bright child in primary and secondary schools. I flunk my English I x like studying. I x learn when the teacher teaches in front. But I can pick up what the teacher next class was teaching. I listen, and I understand. I like to put together and organise things accordingly. I'll be stress and anxiety. Now I am an excellent teacher (a name of a post) and Canon (camera) partner photographer for national geography Asean... I x understand till now

R15 is a teacher and a mother of a child with different learning traits. A medical doctor has confirmed that her child is not a disabled, but her child has a learning difficulty. She acknowledges that her child and several students in the same class have difficulty to copy down notes from the whiteboard, hence have problems with learning. The child's learning difficulty has also affected the child's self-esteem.

R15: Now, I am working on improving h*** self-esteem. Dr said she is not an OKU (disabled). She wants to do homework and learn with teachers who care for her ... if she is scared with the teacher, she will keep quiet. I discussed with her teachers about her and her Malay language teacher try to comfort her and touch her more, this year I can see her changes... she begins to raise her hand and write sentence construction at the whiteboard, meaning she is more confident now.

R15 is very enthusiastic with PAJSK – a new type of national assessment where students are evaluated based on physical education, co-curricular, and extra-curricular activities besides academic. Since PAJSK is newly introduced, R15 claimed that many teachers tend to look down on students who are active in co-curricular and non-academic subjects. A teacher like R15, who has a child with different traits, is intrinsically motivated to learn more about learning opportunities for students with different traits. It seems like PAJSK is a great assessment where students with different learning traits could showcase their real talents. Hence, watching V2 that featured successful dyslexic increased R15's inspiration to find ways to support her child as well as her students who faced the same difficulties.

R15: Definitely it affects me because nowadays we don't do streaming so I can see some students have learning problem... especially when I myself have a child with learning difficulty... Now in Malaysia student must complete PPSR ... meaning not only the students need to sit for UPSR (current national academic assessment) but also PAJSK (co-curricular with co-academic, posts in school) with her PAJSK diagnostic test score A because she has an international certificate for scouts, she plays taekwondo, chess... I prepare her for activities with high scores. Need to work smart with PAJSK ... not necessarily involved in many sports ... what is most important is the highest number of participation. This is a new... the year 6 teachers who focus on 4 main subjects always look down on students who are active in co-curricular, co-academic. In the beginning, they don't even care... but when they see the effects on students... then only they open their eyes... many teachers don't understand the system to manage students. So from LINUS, I now start giving a talk to parents in year 5 and 6 on outside classroom activities awareness.

5.1.3 Taare Zameen Par – Video#3 (V3)

Taare Zameen Par, a Hindi movie, was recommended by the participants who have watched the movie during special education workshops they attended. The movie explores the life of a dyslexic child at home and in school. Teachers were given freedom to comment (for or against) on any artefact they have watched. Findings in the following section are from R4, R8, R12, R13, and R14 (5 of 15 participants). Refer to Appendix K for the excerpts of the participants' reflection analysis.

V3 is a movie that tells a story from different perspectives. It touches most audience's emotion.

R8 and R13 provided the values they perceived after they watched V3.

R8: The movie touches on emotional value - use the emotional compass to get the audience 'feel' the movie.

R13: When we watch it we can feel the character

R13 sum up how V3 affects his emotions.

R13: The movie's situation is much closed to us...emotional game 😊. Angry, sad, and happy.

R13 feels angry and sad about how the teachers and the parent treated the dyslexic child.

R13: Angry...when the students were smacked, scolded and belittled by teachers...abandoned by family. Sad... watching teachers' attitude whom x want to understand the students...irresponsible father

It is also sad because according to R4 and R14, what happened in the movie is actually happening in real life.

R4: This is sad. It happened in real life... mostly 😊. Especially the outspoken type...I knew someone like that. Yes...making a judgement without investigating whats wrong Actually...i was like that b4... 1st yr of my teaching practice 😊 Feel uncomfortable...angry and all. Well... we teach them tens of times, but they still didn't get it. Then walk around the classroom. Aish... really tested me.

R14: This is the best movie...it portrays the reality that happened

But at the same time, R13 feels happy to watch the child succeed in the end with the help of a caring teacher.

R13: Happy...when the students succeed after getting the right support from good teachers who are caring loving and creative in teaching

R14: It featured a teachers' determination to nurture his special need student

Nonetheless, R12 feels funny watching naughty boys in V3 as it reminded her of her year one (seven years old) students.

R12: Hahahah... Working with y1. Hahahaha 33 and many boys. That's why...

5.2 The Teachers' Learning Process as the Supporting Evidence of the Triggering Messages

According to Garrison et al. (2010) model of practical inquiry, when learners are successfully triggered, the learners will begin to explore the new knowledge, integrate with their previous knowledge (where problems and issues were identified) and arrive at the decision making stage (where problems raised are solved). The extended stages of the learning process are evidence that the learners' current level of knowledge has embarked to the next level. The findings presented below are collective responses of the participants, which indicated that input from various artefacts had facilitated the participants' learning.

5.2.1 The Exploration Event (Building Up Understanding and Knowledge).

The teachers 'think aloud' behaviours signalled that the teachers have started to explore issues related to dyslexia by building their understanding and knowledge about dyslexia. R2 and R11 began to explore criteria of dyslexia by making comparisons. R2 compared the behaviour of the dyslexic character in V2, Tom, with her child. R2 realised that her child exhibits the same behaviour as Tom but do not seem to have a problem with reading.

R2: My child shows a few acts similar to dyslexia, but he seems to not having prob in reading.

R11 compared identification process in first and second language classes. R11 recalled previous reading information on the effect of the first language skills on the second language acquisition. R11 pondered on difficulties to identify what contributes to learning difficulties in the second language classroom as they may be secondary effects.

R11: Is it easier to identify dyslexic kids in 1st lang. classrooms than foreign lang.? Are there differences in the symptoms between first n foreign lang classrooms. Many of the symptoms can be found in my kids who are not only behind in english but struggled in bm as well — ive read sumwhere that 1st lang skills hv effects on children's acquisition of 2nd language skills. In terms of english classrooms, it is rather difficult to identify what contributes to pupils' difficulties to read and comprehend. Some of the symptoms esp those involve reading and comprehension skills.

R8 also mentions the issue of English as the second language. Not only that R8 criticised the validity of LBI (Linus for the English language), but she was also frustrated with the number of times that teachers have wasted in implementing LINUS for English.

R8: But this shouldn't be personal (reminding myself), so i was thinking of getting to know the students. The less teaching time and when there is sort of choices for kids, they are bound to have favourites

Interviewer: Busy catching up with the syllabus?

R8: No. Catching up with govt's expectations. Not syllabus. But exams. They say we less exam oriented but s's still been assessed, and gb's (head teacher) still stuck with how to give a reason why s's fail an exam which is NOT valid in the 1st place (think of linus student who needs to answer exams that are build based on mainstream syllabus) blabla

Similarly, R2 reflected LINUS as a programme that hinders teachers-and-students' bonding time. Thus, teachers fail to provide the students with attention and teaching and learning facilities they need like the one promoted in V2. Hence, after watching V2, R2 contemplated that LINUS is not the right programme to support students with learning difficulties because teachers do not see the outcome.

R2: LINUS2.0 is NOT the solution. Well, Linus is good, but the terms and condition they put into executing it are ridiculous. Hence, instead of helping the kids to read...teachers are burdened with how to fill up the bppi gorm and so on. To make it worst...they set the kpi to achieve, which makes linus looks like a test instead of just screening. If teachers can focus more on SCREENING ...maybe they can do something to help the kids. Even the time given is not appropriate. Just by looking at the date...yes...it looks like more than a month. March 1st till April 8th. But that is the same month for district and state level sports, one-week

school breaks, and 1st summative test. I can say one of the busiest months for teachers. Teachers are looking for time to accomplish the screening and filling up the forms. The funniest thing is...there is no feedback on the screening itself and the items. Teachers are not allowed to share the reading or writing instruments. Even pupils don't know their errors or mistakes. We just have to key in the data.

Despite the complaints about the LINUS program, all teachers have strongly expressed that they need to be trained on how to conduct early dyslexia identification. R2 and R11 expressed the importance of identifying learners' needs.

R2: There should be a good approach or method in identifying the dyslexic and a special team to help them.

Being proactive, R10 asked the researcher if there is any checklist of dyslexia criteria that teachers could use to help them identify the problem. The researcher has later shared a link to primary school dyslexia checklist by the British Dyslexia Association and encouraged the teachers to explore other checklists. R10 and R11 responded that the checklist is very beneficial for teachers.

R10: 👉 Icip displays almost half of the list. This checklist is very good. Can I use it in school? All teachers should refer to this checklist, not only linus.

R11: I think the checklist would be more beneficial in school settings. So, as a teacher, i would pick the checklist. The criteria are described explicitly and focuses more on the learning process in the classrooms.

One of the V2 production objectives is to promote Westmark School as a great school for the dyslexic. Hence R2 viewed V2 as an eye-opener for the Ministry of Education. Since Westmark is portrayed as a school with a flexible education system that understands every learner's needs, V2 is admired by teachers who long for more times to spend with their students and have small size classroom: and teachers (R1, R2, R5, R8, R9, R10 and R14) who are inspired to make changes to education system.

R2: Video 2 may not be attractive, but it can be an eye opener for the MOE in planning for better education to all children. Video 2 helps me in knowing what i should do if there is a student with dyslexia in my class.

Besides the facilities, Westmark School teachers' expertise has gained R14's attention towards the issue of teacher training for dyslexia specialist in Malaysia.

R14: Interesting video... In M'sia we don't have expertise like that... if there is, not so many who meet the standard... very few... most teachers convert from remedial to special needs. We don't have dyslexia specialist... those who enrol for special needs are general, special needs... not specific... unless for deaf and mute...only at school will they be teaching according to what is assigned for them.

R9 is excited after getting confirmation about dyslexic intelligence capabilities

R9: It's not a disease and nothing to be afraid off. Why? Because it does not affect the intelligence of the kids in another way.

However, R13 felt the opposite. From R13 observations as a remedial teacher, learners with learning difficulties will be able to learn if they were trained with learning skills, but their

capabilities are limited and never exceed the capabilities of learners without learning difficulties.

R13 claimed that *“That is a reality”* in the Malaysian context.

R13: learners with learning difficulties normally cannot follow the teaching and learn like other children... they are slow and continuously left behind. That is the reality.

Therefore, R13 thought it was unbelievable to watch dyslexics interviewed in V2 turn out to be successful professionals.

Because teachers lack knowledge about dyslexia, according to R4, teachers may dislike dyslexic and regard them as burdens.

R4: But...cannot also deny some of them will look down on dyslexics. Saying that why x send to SEN school. Such a troublesome in this school..bla..bla..bla. Its a burden for some teachers la. But thats my opinions...some may disagree

Interviewer: Burden how's that?

R4: Dislex pupils in main stream sch. Teachers need to catch up with the syllabus, but there is a hurdle. Then the class overall exam result becomes ugly because there is failure hihhi

R13 claimed that with the right methods and approaches, the students could succeed and R14 claimed that society would not look down on dyslexic anymore if they get the right support.

Therefore, R12 think that teachers should explore ways to support students with learning difficulties.

R12: Teachers should experiment...exploring possibilities or ways to comprehend and help the kid

R13: Till now, I can still remember how the teacher helps the kid. When we have the right method and approach to help these people... X impossible they can be more successful than us. Most importantly, we can help our students in their education for their future.

R14: Many approaches utilised so that his student become normal in the eyes of society.

Most importantly, R14 believes that teachers should not discriminate any student.

R14: Most importantly, I take the teachers' determination to teach any students regardless

5.2.2 The Integration Event (Emerging Ideas and Decision Making).

Using their background knowledge on the Malaysian current education practice and the new information about dyslexia, the teachers, began to argue about the challenges and the possibilities of dyslexia support provision.

In the previous section, R8 commented on the objectives of LINUS programme. According to R8, if the objective is to screen learners' needs, then the instrument should be made in the first language; but screening the students' English language skills will only inform the teachers and school of the learners' language skills, not the needs. Earlier (in the pre-message framing study), when commented on LINUS programme, R8 claimed that LINUS is a redundant programme and added to teachers' burden. However, after the artefact viewing activity, R8 agreed that LINUS is

important to help teachers identify learning difficulties, but the instrument should be designed in the first language.

R8: So with regards to this, IF the aim is to identify problems, i.e. spld, then the screening should be tailored to fit the aim. Hence the q's should be in mother tongue etc. to lessen any possible interference(s) in the screening process. But when they screen in English, it's like they wanted to know s's mastery in the language, thus, questioning the validity of the LBI Instrument to detect any learning difficulties. I mean, to me, LBI (Linus for English) instruments are not valid to know whether the students we screen has learning diff. or not. Huhu...

R11 recommended that teachers and schools develop strategies and collaboration to support students with dyslexia.

R11: Teachers of different subjects should get together n discuss the case of any suspected dyslexic. A clear SOP should be developed so that the strategies to help the kids are done in an organised manner to get the desired outcomes. It would be great if teachers, schools and the system can support those 🖐

Besides, R2 mentioned teaching a small group of students as one of the strategies that should be implemented.

R2: I will find ways to teach them. I will either teach one to one or maybe in a smaller group like 6 to 8 persons in a group.

R1 has considered supporting dyslexics by offering an extra class.

R1: I dream about offering extra class when I start realising their potential.

R13 suggested that teachers need to produce more teaching aids and conduct interesting lessons.

R13: that's why we need to do something...like what I said earlier... build more teaching aids and conduct teaching and learning that gain the students' interest.

Besides that, R1 and R2 recommended that MoE build more vocational schools.

R1: Like vocational school...do you think we should have more? To me, we should.... Because sometimes their strengths are not in academic but in skills.

R2: Vocational school is really important. My child needs a school like that. Sometimes on academic too but only one subject that they like. Like science, because there are lots of experiment. Or Maths. Fail all subjects or low marks except the one they like

The teachers have also started to recall several reading methods that they have used previously.

R1 recalled a method used to teach English in early 2000 called shared reading where symbols are used to guide poor readers to read. Although R1 likes the phonics method, R1 thought that shared reading method is better for dyslexics. It fits the need of dyslexic students, as the dyslexic students' needs are different from normal students

R1: Those who teach English last time, early 2000 maybe... we have a shared reading method adapted from Australia... that method I think is suitable for dyslexics because they decode each word as symbol... the poor reader can read... there is a special book they read... but then MoE asks us to use phonics... is it... the font in that book is also big. I think that method is better for dyslexic, but overall phonics is the best... So, teachers xuse the same method to teach everyone.

Like R1, R8 also agreed that shared reading is the best method for teaching the second language to students of beginner level. Unlike R1, who is thinking about reverting to the shared reading method, R8 is more proactive and has already implemented a shared reading method in her classroom.

R8: No. I do shared reading bcos i'm teaching rural kids with no/minimum exposure to the language.

Nonetheless, R8 argued that LINUS programme required the teachers to test the students' reading ability by asking the students to read aloud.

R8: Hehe but we have to ask them to read aloud to us for LINUS screening. It's ok, but the kids are labelled LINUS first before dyslexia. So to me, it's kinda degrading and unfair. Bcos even though they are dyslexic, they'll be called LINUS students. And in school, LINUS students are like slow learners, low-achievers among their friends

Nonetheless, R2 has still not embarked from the idea of exclusive education. Even though R2 agreed that dyslexics could learn in a mainstream school, R2 preferred that specialised teachers in a specialised classroom teach dyslexics.

R2: X necessarily sent to special need school. It is enough if there is a dedicated special need class. Help them by motivating and building up the kids' self-esteem.

R9 insisted on the importance of early identification in order for teachers to assist the learners in managing their difficulties. R1 and R7 believe that all teachers should be involved in the training.

R9: The most important we detect it earlier and help the children in solving it.

R1: MoE should give us specific training on identification and intervention for students like this. Not only remedial teachers or special need teachers only.

R7: Teachers need to be trained with special teaching method for dyslexia. There should be a special system for dyslexics because there are also students in my class who are genius in mathematics

R7 and R12 highlighted on teacher training. According to R7, one of the reasons why teachers act negatively towards dyslexic is because they are not aware of the learners' problem. According to R7 and R12, a series of courses (short courses) which focus on specific skills are recommended.

R12: I would recommend all teachers to attend a series of courses

R7: If given a specific course and talk...I feel like all teachers should be ready... easier to face such students in class...so that I wouldn't be emotional when facing such students.

R2 and R7 further elaborate on the vital issues that need to be highlighted in training.

R12: ... attend a series of courses where they learn more about dyslexia, the symptoms, how to deal with the special children and actions to be carried out after discovering these children in school.

R7: Teachers need to be exposed @method of special education managing dyslexic in class. Need to create a special learning system for dyslexic student as there is a student who has dyslexia symptom in my school whose thinking is genius, especially mathematics.

Not only teachers need exposure, R12 believed that parents and other students need to be aware of the problems.

R12: Perhaps, the school administrators should also expose (in a fun and interactive way) various learning disabilities to the children and parents particularly during the PTA meetings or Children's Day just to raise awareness, and hopefully they could help more people and community in the future.

R8 pointed out a very critical issue with identification. R8 reminded the researcher that in Malaysia, teachers do not spend their times with the students throughout the day. Teachers, including the class teacher, enter the class to teach their subjects (30 minutes per session for primary school). It is vital to understand that there are at least 10 subjects are taught at level 1 (year 1 to year 3) and at least 14 subjects at level 2 (year 4 to year 6). Each teacher could meet the same student for two to three hours a week. Hence, teachers and students rarely have bonding time. Unlike in certain countries such as in the UK where the class teacher teaches all subjects, stay from the hour the school session starts to the end every day. So the teacher has more times to know, observe, and understand each student.

R8: I studied in the UK. I also was a student in a UK school when my dad furthers his study. In the UK, I had one teacher and a teacher assistant. When I came back to Msia, I hated school cos teachers change hourly.

Interviewer: tell me about it

R8: When that happened, i tend to cause troubles in one t's class all the time and ace in another t's class

R8: So if i am the teachers

R8: There are bound to be different report right. In tcher A, i will do everything (hence if i'm dyslexic, i'll try to adjust) but in tcher B, i'll drift away

R8: Cos i also read yg dyslexic s's can adapt to 'normal-style' learning system... Hehe... But

R8: If only one tcher in the class who is with me the whole tim

R8: *time

R8: The report would be different from these

In order to increase teachers' awareness, R8 also recommended that school put up banners on the importance of the dyslexia early identification.

R8: Put up a banner about dyslexia identification and the importance of screening.

R8, on the other hand, are demotivated by the education system in Malaysia. Although all the artefacts inspired her to help and support students with learning difficulties, R8 considered other factors as a huge hindrance for her to teach dyslexic in an inclusive system. R8 think it is impossible to have dyslexic students in her mainstream class.

R8: No. Because I can even manage having LINUS students who don't even have special needs in my class, and teachers need to be trained. It is not a matter of willingness but is this even possible? Do you know the amount of admin work that t's had to do which interrupt teaching and learning time? This is what I mean by the hindrance to include dyslexic in mainstream class... we got the messages, but the pressure in school is there unless it reaches the policy makers.

R14 insisted that teachers should teach based on their expertise. The unnecessary subject should be reduced, and the timetable system needs a revamp.

R14: Teachers should teach according to their expertise...not teach just anything...reduce unnecessary subjects...timetable system should also be revamped...

R13 claimed that dyslexic learners in Malaysia are mild dyslexics and can be cured by training them basic reading and writing skills.

R13: Teachers will help in their ways + knowledge from the training...

Normally our students are mild dyslexics...like writing reverse letters if the letters look alike... Not like the one in the movie where the letters dance or writing from back to front

Interviewer: There's a teacher who said that we need to correct the students who write reverse letters. It's a habit... soon they will write correctly. Agree?

R13: Agree... That is one of the, but there are many more if we are creative and understand the students like this. We, as remedial teachers, are just helping them to master basic reading and writing skills...

If the students are dyslexics, but they can learn like normal student...

Therefore as teachers, I think the student's problem is solved

5.2.3 Resolution Event (Intention to Act).

Due to some challenging aspects of transformation mentioned in the previous section, the teachers realised that they could contribute to their capabilities. The participants' reflection in this section indicates that the participants have intentions to act on supporting dyslexia identification and intervention.

With a new understanding of dyslexics' difficulty in reading and learning without assistance, R2 claimed that she doesn't give much work for students to take home. R2 prefers the students to complete their tasks in class.

R2: Honestly, I don't give much homework. Normally take home unfinished in-class task. But I give them words/ phrases/ sentences to be memorized for spelling and dictation. Project work with time frame

R2 strongly supported her idea of penmanship by claiming that she has done some research. Hence, she is firm on this opinion before and after watching the artefact.

R2: There is a smart student but write in the wrong ways. They write from bottom to up. Like the letter f. from the bottom, they write upward and make a curve then draw a straight line. The b is written like number 6 just that the line is straight. I researched this. Sad when I know the reason is penmanship wasn't taught.

The Malaysian education system is known to be exam-oriented. According to R2, *'Teachers only look at the outcome. Not how the students do.'* In R2's opinion, students should be encouraged to reflect and express their thoughts about their learning. That way, teachers would be able to evaluate the teaching and learning process.

R2: I want to make sure that all children were given opportunities to talk about what they want.

Before the artefacts viewing the session, teachers complained that students' exam results are one of the teachers' key performance indicator (KPI). Thus, teachers were always blamed for students' low achievements. Nonetheless, after the artefacts viewing activity, R11 has gained more confidence to teach for the sake of students' learning; and will not be intimidated by the superior's judgement on teacher's KPI based on students' attainment.

R11: I want to create learning environments that give every student an equal chance to prosper. I want to be more positive 😊. I want to break out from the grips of perceptions that teacher's kpi is based on students being excellent in answering exam questions.

Contradicted to R11, R7 lacks motivation. R7 said, *'don't think I am capable of teaching dyslexic'* but *'willing to learn how to identify dyslexia.'*

R10 was excited to find out that he did the right thing to record his classroom activities. R10 claimed that he could see the changes in his students' behaviour. R10 refers to his student named Icip, who seems to display characteristics of a dyslexic child. According to R10, he can see Icip's differences from last year as compared to this year.

R10: I gave chances to a weak student like Icip. Just to instil his confidence. When I do class activities, I will ask him to lead. I can see his braveness now. He is so happy even though his friend laughs at him. In 3 months he can already read in Malay language and surprisingly, english! Now he is out of linus. Really happy! Last year he can't even recognise letters. One more, teacher factor like mr teasedwell in V1. Previously, icip always skip from schools. So, the teacher gets frustrated, and the student gets frustrated too. Now he doesn't skip school anymore

Besides, R10 found that the students were more motivated to learn when they knew they were recorded. Hence, R10 decided to continue recording his students and use videos as the mean to get to know his students better.

R10: In my case, I've already produce 10+ videos but the rest still in editing. Everyday this particular Y3 class, always eager waiting for me and keep looking for me. So I was thinking, there must be something that triggered them acted like that. I found out them being in the video.

Unlike R2, R10, and R11, R3 did not mention about her teaching plan but was excited to share V1 with other friend and hope that it would help the friend to realise about her child's problem and explore more about SpLD. Nevertheless, as R3 is so immersed with her current problem with her friend's child, she did not focus on dyslexia but SpLD as general. Nonetheless, her action (of sharing V1) shows that the artefact encourages her to spread the dyslexia awareness.

R3: Greetings dear... An autistic child is a special right...I saw this programme (an advertisement for the autism programme)... it reminds me of you. I share your videos, ok. Who knows she would be more accepted to explore about her child (Response to her friend's problem)

R2 and R12 think that teachers need to have tolerance when dealing with learners with learning difficulties. Rather than expressing her intention to act, R2 recommended other teachers to watch V3 in order to understand slow learners better.

R2: If you are looking for something to motivate the teachers on how to see from different angles about slow learners in school, I would suggest that Hindi movie.

R1 is more cautious with students who might struggle to copy notes from the whiteboard. To make sure that students who probably have problems with copying are helped, R1 has started to provide more worksheets.

R1: I have changed to worksheets now because not only my child has problems with copying.

R5, who mentioned that she feels responsible for helping students with learning difficulties, requested the school managers to assign her to teach classes for low-achievers the next academic year.

R5: I have asked the administrative to give me back classes... at first, we may not bear with these children... but if we get to know them... there must be another side of them that brings out our empathy. They will make us a place person to talk their heart out.

Likewise, R1 decided to teach year 1, starting from the new academic year, even though teaching year 1 is challenging. R1 wanted to observe year 1 student, especially her child.

R1: Yesterday, I was given an option to let go either year 4 or year 1 class because there is a new teacher in our school. So I decided to let go year 4 even though it is challenging to teach year 1... all in one class. So because of your research, I wanted to carry on teaching year 1 although I have stopped teaching them 4 to 5 years ago. Can? Kih3... because something is interesting there. So I need to continue investigating my son.

R5 too feels like it is her responsibility now to help other children who may suffer the same problem as her child after watching and discussing V2.

R5: Before this, I have been thinking about my child. But since I participate in this study, I feel more responsible for helping other children like mine.

R12 recommended the standard operational procedure when dealing with slow learners because she has done it many times, and it shows positive results.

R12: But actually when it becomes a routine... I mean I've trained them from the beginning of the year we'll get used to simple instructions...short sentence of course haha...then role models... act together...and repeat the whole class the steps...haha Rarely they asked again because their friends will remind... And they use Eng 😊😊😊 Simple because they repeat...teacher said... "Colour the pictures/the garden etc." Cut the pictures etc. and paste. Hahaha, the same with an older student.

The core procedure is to give the students simple instructions.

R12: As a teacher, once we've recognised certain kids that we sometime label as 'blur'...

1. Simplify / shorten instructions

Eg. Colour the shapes...cut them...and paste

2. Model and ask the Ss to follow the instructions...highlight the verb...with actions...like colour, cut, paste...

3. Keep on checking
- Asking them after two or three mins
- The next step...
- And put the simple instructions on the board

5.3 The teachers' perception of effective dyslexia awareness messages.

Overall, the participants agreed that they had acquired new knowledge from all three artefacts but admitted that they have artefact preferences. 8 of 15 participants preferred V1; 10 of 15 participants preferred V2; 4 of 15 participants preferred V3. Figure 5.1 below indicates the distribution of the participants' artefact preferences.

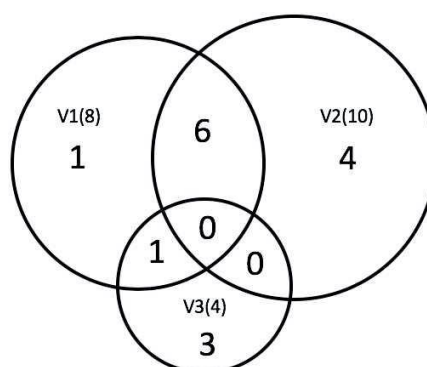


Figure 5-1 Distribution of the Participants' Artefact Preferences

5.3.1 Strengths and Weaknesses of V1

R2 and R 11 agreed that V1 is a good introductory artefact to dyslexia.

R2: V1 good for novice teachers. Since I know a bit about dyslexia, I like V2 more, but yes V1 is damn good as an introduction and motivation for teachers to know and handle dyslexia. It reminds me of the number of my students who might be dyslexics, which I labelled them as lazy.

R11: The most impactful would be the 1st video. The first is better for raising awareness. Good intro for teachers and parents to make them think deeper when faced with similar cases. The second video is definitely the next steps to check if it really is a case of dyslexia.

R1, R4, and R15 justified that V1 presentation is simple and organised.

R4: Yup...enjoy more. If it contains only facts... high level phrases... it spins my head trying to understand. With the animation video tell people about their disabilities but hard to do.

R15: More organised...step by step.

R1: The cartoon's presentation is actually on point.

R8: V1 and V2 is a focused and straightforward exposure to ppl who are dyslexic.

Therefore, R7 and R9 claimed that it is easier to understand the dyslexia conception after viewing V1.

R9: Honestly, from the Hindi movie, I understood about the people who have dyslexia. In the term to learn about dyslexia, video 1and2, you shared more clear and suitable to understand about this. From the short video, I learn about the concept. Because before

this I'm not too clear about dyslexia. I'm always confusing it with autism. Even though in my school, we have 5 classes for special kids with a problem in learning, their problems are different.

R7: When watching this video, I understand that maybe one of my student who is very slow in writing and can't follow the teacher's pronunciation at all might have problems with dyslexia.

5.3.2 Strengths and Weaknesses of V2

V2 is an exclusive interview with dyslexics, unlike V1 and V3, which only mentioned some names of dyslexic people. By featuring the successful dyslexics, V2 has inspired the participants.

R4: V2 portrayed successful people. That's why it's very inspiring.

R5: I prefer V2. They have a representative from the successful dyslexics... more convincing the general public and teachers who have zero knowledge of dyslexia. And also the experience of those around the dyslexics.

R10: This is a great video. Very moving and comprehensible. I think this one is more encouraging and effective when they relate to famous and distinguished people. For me, a good introduction to dyslexia awareness... it features distinguished people and popular such as Stephen Spielberg, tom cruise, etc. ... Like the video bcoz I get the first-hand knowledge and experience from the person who diagnosed having dyslexia... For me, I like most the 2nd video. The 1st video didn't mention any famous people like 2nd video. So, people in dilemma whether is dyslexia something good or something else. Oblivious. Yes...convincing.

Most importantly, V2 introduced the participants with real successful dyslexics who are still alive, unlike V1 and V3 that showed the photos of successful dyslexics.

R1: In V2, they interview real people compared to graphic... haha. The cartoon's presentation is actually on point, but if you ask about preferences, I would say V2.

The participants gained confidence when watching the successful dyslexics themselves explained their situations.

R13: The dyslexics themselves admitted that they experience such situations. If we give an example without any evidence, it would be difficult to believe. There is one time, when I attended a course, one of the speakers said Tom cruise is dyslexic. We would like to believe but find it hard at the same time because Tom cruise is not our schoolmate 😊.

R8: V1 and V2 is a focused and straightforward exposure to ppl who are dyslexic. With the movie, we have to 'guess' what the feeling/needs the kid in the movie and might be clouded by our emotions.

Although R11 agreed that V2 is convincing, R11 found that V2 presentation is a bit complex.

Hence, R11 recommended that follow-up discussion or reflection would improve V2 presentation.

R11: The second video is definitely the next steps to check if it really is a case of dyslexia. I found the video a bit too long for an introduction. It shows many things at the same time; being dyslexics do not determine one's success or not in life...how it feels to be dyslexics...someone can have it for so long without realising it...suggestions for the problem... It should be followed by a little discussion or reflection."

5.3.3 Strengths and Weaknesses of V3

V3 played with the audience's emotion that has drawn the participants to immerse into the characters and situation.

R8: The movie touches on emotional value - use the emotional compass to get the audience 'feel' the movie

R13: The movie's situation is very closed to us...emotional game 😊

R4: I like the movie cos more to real life made us realise... that there are actually people like this. Actually, there is a teacher like this who are willing to give the best for such student who manages to identify the student's strength.

Similar to V2, the characters in V3 too are real people even though it is fictional.

R13: I think when listening to real people talking is more convincing. When people talk, there are facial expressions... If cartoon there's only voice intonation.

R4: Real person especially handsome actor hihhi... by the way, amir khan (the actor) himself is dyslexic. It's like watching a true story.

V3 is an entertainment video but educational at the same time. Not only that the characters are real people, having a popular actor played the protagonist role could elevate the Hindi movie fans' interest to watch.

R4: Maybe because of aamir khan...fancy his beautiful voice Kikiki...I was a hindi movie fan. I'll watch the hindi movie at TV3 every Saturday...Uish (phew) I really like if Shah Rukh Khan... I will definitely be in front of the TV

R13: Story is different... There are beautiful flowers, beautiful ladies, handsome man, especially about love.

Due to its long duration, V3 brought the audience to explore different kinds of situation.

R2: There are lots of flavours in the movie, including the love of a mother. The anger of a father.

R13: Film is from small to big... from xknowing to knowing...and inserted with the empathy aspect. To me, the simulation made me understand better.

R12 prefer to watch the movie by sections as there is too much input at one time, and that could baffle the audience.

R12: But if the audience is used to that movie... you can search....Like the in class scene...the one that he wrote is of the prominent scenes because there are the characteristics <https://youtu.be/BBj7VtB-k-s> this is what the teacher did after he knew. Short is sweet hahaha, but if you can get other clips that are fine...relevant to the sections you wanted to focus. I mean there are clips suitable for intervention... there's a suitable one to getting to know or explore the kid's mind. Since it will be more organised rather than watching the whole movie and reflect one by one can be perplexed? Hahaha

5.4 Summary and Interpretation

The participants' reflection on how they feel and why they feel that way after viewing the artefacts suggested the way the audience is triggered. Under the consideration of framing theory, these reflections are known as framing effects. The triggering event is the primary framing effect,

which leads the audience to explore more about the new information learned, and integrate the new and old information to find a resolution or conclusion. Table 5.1 summarizes the emerging themes deducted from the online learning process model (Garrison et. al., 2001) which was pre-determined as the code manuals for the data analysis of the first part of the pre-message framing, as mentioned in 3.3 [inductive and deductive approach]. The emerging themes are also identified as framing effects of the messages on the audience.

Table 5-1 Framing Effects of the Messages on the Audience

Triggering event		
V1	V2	V3
<ol style="list-style-type: none"> 1. Regret that they labelled their students. 2. Understand that overall scores do not indicate the students' real learning performance. 3. Realise that dyslexia is a reading difficulty that affects writing. 4. Realise that the issue of dyslexics' marginalisation is a serious issue. 5. Understand the importance of identification. 6. Understand that dyslexia cannot be cured. 7. Realise that teachers lack knowledge and training about dyslexia. 8. Realise that teachers should avoid scolding and punishment. 9. Realise that dyslexics' minds work differently. 10. Realise that truancy is an indicator of learning difficulty. 	<ol style="list-style-type: none"> 1. Realise the potential of students who seem to be slow. 2. Interested with schools like Westmark. 3. Realise that too many examinations limit the students' chances to explore and showcase other intelligence. 4. Understand that small class size is important so that teachers and students need more bonding time. 5. Realise that students' self-esteem needs to be raised. 6. Realise that students' non-academic skills need to be encouraged and acknowledge. 7. Surprised that dyslexics have the capabilities to succeed in academic. 	<ol style="list-style-type: none"> 1. Angry with teachers and parents who punish, scold, and belittle students. 2. Realise that teachers need to be more patience and caring. 3. Realise that there is a way to help students with dyslexia.
Exploration event	Integration event	Resolution event
<ol style="list-style-type: none"> 1. Suggest that a good checklist would be useful to help teachers identify the problems. 2. Suggest that difficulties in second language learning maybe the secondary effect of dyslexia. 	<ol style="list-style-type: none"> 1. Argue that good teaching approach and strategies need to be implemented. 2. Argue that all teachers must be made compulsory to attend training on dyslexia identification. 3. Argue the validity of LINUS BI (the literacy and 	<ol style="list-style-type: none"> 1. Provide worksheets for students. 2. Teach penmanship. 3. Give students more opportunities to express their feelings and describe their learning experience. 4. Reduce the amount of homework. Learning

3. Suggest that too many examinations hinder teachers-students bonding time. 4. Suggest that the screening program is important but should not be redundant. 5. Suggest that teachers' workload hinders identification process. 6. Suggest that society's stigmatisation on dyslexics' stupidity could be stopped if dyslexics received proper learning support. 7. Suggest that teachers should stop discriminating their students.	numeracy screening in the English language). 4. Argue that several reading programmes should be implemented to meet diverse students' needs. 5. Argue that several changes in the system such as the class size, the workload, the numbers of subjects and the teachers' mobility frequency need to be addressed so that teachers could spend more time with their students. 6. Discuss that awareness campaign should be carried out. 7. Argue that more vocational schools should be offered.	enhancement should be completed in school where teacher's assistance is available. 5. Record students on videos to help identify the students learning patterns. 6. Provide a standard operating procedure (instruction) to slow learners.
--	---	--

5.4.1 The Triggering Event

Findings from all three artefacts indicated that the participants are emotionally triggered especially by V1. The emotions expressed by the participants are frustration; anger; and sadness with themselves and the system itself. Teachers mainly talked about their old teaching times; the way they behave in the classroom; and their lack of awareness. V1 has inspired teachers to reflect on their teaching behaviours and possibilities of having a dyslexic student in their classroom. The teachers also expressed their regret of failing to identify the problem with dyslexia earlier that may cause the students to suffer from the school experience. Similarly, teachers reacted emotionally when they view V3. Nonetheless, the emotional reactions were expressed as a third person rather than a first person like the way the teachers reacted to V1. The teachers do feel sad for the dyslexic character in V3, but the feelings expressed do not reflect the feeling of regret with what happened in their classroom like in V1. Rather, the reaction of sadness after viewing V3 is more towards the feeling of empathy towards the character. The teachers also expressed their regret after viewing V2. The type of regret expressed upon viewing V2, however, was directed towards the possibility of dyslexics to have a successful future. The teachers admitted that there were students in their early years of teaching who exhibit the criteria of dyslexia, and they knew to have the potential to be a successful person. Should the teachers know dyslexia identification earlier, the teachers felt that the students might have become a successful person now.

Besides feeling sad, guilty, and regret, the teachers were also inspired by the appearance of successful dyslexic professionals and celebrities in V2. The teachers were also moved by Westmark School in V2 which accommodate the needs of dyslexic students, especially the fact that the school has a smaller class size and well trained teachers. It can be interpreted that V2 inspired the teachers to be trained for identification and to contribute to the changes in the education system. V3 affect the teachers personally as they express their inspiration after watching it. The substitute teacher character in V3 who showed how he had patiently tried several teaching techniques with the dyslexic child, which led to the child's improvement in learning has inspired the teachers to do the same. The teachers believe that they too can help the children with dyslexia.

Overall, analysis of the findings shows that 11 out of the 15 participants commented upon the ignorant teacher characters featured in V1 and V3; 7 out of 15 participants mentioned the successful dyslexics in V2; 3 out of 15 participants mentioned the multisensory teaching approach in V3; and 2 out of 15 participants mentioned the dyslexic's unique way of thinking in V3. The themes deducted from the participants' reflection were conceptualised, identified, and categorised as the triggering messages - the general-higher-order codes [refer to Chapter 3, table 3-2 for further description of the coding system]. The following list indicated the regrouped emerging themes from the participants' reflection to the new themes for the triggering messages:

i. The effects of being ignorant teachers [general-higher-order code].

Source of codes [from the emerging themes]:

- a. Regret that they labelled their students.
- b. Understand that overall scores do not indicate the students' real learning performance.
- c. Realise that dyslexia is a reading difficulty that affects writing.
- d. Realise that the issue of dyslexics' marginalisation is a serious issue.
- e. Understand the importance of identification.
- f. Realise that teachers lack knowledge and training about dyslexia.
- g. Realise that teachers should avoid scolding and punishment.
- h. Realise that truancy is an indicator of learning difficulty.

ii. The successful dyslexic professionals [general-higher-order code].

Source of codes [from the emerging themes]:

- a. Realise the potential of students who seem to be slow.
- b. Interested with schools like Westmark.
- c. Realise that too many examinations limit the students' chances to explore and showcase other intelligence.
- d. Understand that small class size is important so that teachers and students need more bonding time.
- e. Realise that students' self-esteem needs to be raised.
- f. Realise that students' non-academic skills need to be encouraged and acknowledge.
- g. Surprised that dyslexics have the capabilities to succeed in academic.

- iii. The multisensory teaching approach [general-higher-order code].

Source of codes [from the emerging themes]:

- a. Realise that there is a way to help students with dyslexia.

- iv. The dyslexic's different brain operation [general-higher-order code].

Source of codes [from the emerging themes]:

- a. Understand that dyslexia cannot be cured.
b. Realise that dyslexics' minds work differently.

Table 5-2 indicates the tabulation of the participants' responses on related issues.

Table 5-2 Triggering Messages

Triggering Message				
	Ignorant Teacher (11/15)	Successful dyslexics (7/15)	Multisensory approach (3/15)	Different brain function (3/15)
R1		/		
R2	/			/
R3	/			
R4	/	/		
R5		/		
R6		/		
R7	/			/
R8	/			
R9	/			
R10	/	/		
R11	/			
R12	/		/	/
R13	/	/	/	
R14		/	/	
R15	/			

Although the teachers have their favourite artefact, the analysis of the teachers' reflections shows that the teachers' overall reflections were influenced by all three artefacts. The teachers' explicit references to a certain scene or character of other artefacts while reflecting on the other artefact showed that certain artefact might have a stronger influence to different participants, but overall other artefacts complement the participants' overall knowledge building. It was easy to identify which artefact triggered the participants' learning inquiry. However, there are difficulties in

figuring out which artefacts sparks the participants' particular learning experience. Indeed, each artefact has its strengths and weaknesses that complement each other.

5.4.2 The Exploration Event

The most significant change that the teachers exhibit after the viewing activity was the confidence to learn how to identify dyslexia that the teachers have developed. Before the viewing activity, some teachers were not very confident if they could conduct the identification process while some argue that identification is a specialised skill that only the special need teachers have. However, after the viewing activity, the teachers realised that they are capable of conducting earlier identification process if they were given proper training. Also, R10 has asked for any dyslexia checklist that teachers could use. Majority of the participants highlighted the importance of the bonding time with their students. This is important to enable the identification process. However, the teachers are sceptical about the identification process success rate as the complaints on the number of examinations given to the students as well as the current teachers' workload are still unresolved. The teachers also claimed that many programmes run in schools. Therefore, there is a possibility to eliminate redundant programmes that focus on similar objectives. The teachers also anticipated that if schools could support dyslexics in learning and become successful, society will never look down on dyslexics again. However, the change should begin with the teachers. Therefore, the participants suggested that teachers should stop discriminating their students.

5.4.3 The Integration Event

The teachers agreed that literacy and numeracy screening is very important, yet the programme needs improvement. Besides screening, some of the teachers also compared shared reading programmes that they have implemented before to Linus reading programme. The teachers carried on with identifying areas of improvement in the Malaysian education system itself so that the challenges and differences could be accommodated. Several issues were highlighted namely the big class size [of 30 to 40 students per class]; amount of subjects that primary school students learn [at least 10 subjects for year 1 to year 3; and at least 13 subjects for year 4 to year 6]; the validity of screening report produced by different teachers because of different subjects taught by different teachers; the validity of screening report produced as there is limited teacher-student bonding time due to high frequency of changing of teachers; and the validity of the screening students' second language literacy.

Not only that the teachers are motivated to help children with dyslexia, but the teachers also believe that parents, other students, and the whole community need to play their roles. It is interesting to note that unlike other teachers, R14 is a remedial teacher who was trained to identify learning difficulties and she concluded that the need for dyslexia identification and intervention is less forceful because there are no severe dyslexia cases in Malaysia. While discussing types of schools, R1 and R2 insisted that vocational schools are important because some dyslexics are maybe performing better in vocational subjects. It is interpreted that V2 and V3 inspired the teachers to emerge with most of the improvement of the ideas. V2 and V3 highlighted that with the right intervention, dyslexics could become a successful person.

5.4.4 The Resolution Event

The teachers recognised that there are major issues to be addressed at many levels regarding dyslexia in Malaysia. Nonetheless, the teachers also realised that they could start helping the students by making small changes in their classroom. It is significant that the teachers in the study were eager to identify their students who are at-risk of dyslexia. For instance, R2 believed that it is important to teach students with penmanship because not every child who has a problem with writing is dyslexic- unless penmanship is taught. This would also help the teachers to identify those who are at risk of dyslexia or any other specific learning difficulties [SpLD]. R2 also hoped that she could listen to the students more, hence, wished to give her students more opportunity to express themselves and reflect on their learning. R10 also agreed that self-reflection is a useful identification method. Compared to R2 who wanted the students themselves reflecting on their learning, R10 believed that he could understand his students by reflecting the videos of his students, which he recorded during lessons. Similarly, R12 has implemented an instructional strategy for slow learners before the study. Instead of sharing her instructional strategy as an intention to act, R12 shared the strategy as something she has done earlier and is proven suitable to be implemented by other teachers to assist slow learner, perhaps a dyslexic too. Some dyslexics also have difficulties to digest lengthy instruction due to a short term memory problem. Another strategy to assist students, which could also help dyslexic students mentioned by R2 was reducing the amount of homework. R2 claimed that she rarely sends her students home with unfinished work. This is because it is vital for students to receive assistance while carrying out in-class activities and school works.

R1 and R5 expressed their intention to teach a specific class. When the interviews were conducted, Malaysian schools were about to begin the new academic year. R1 was given an option to teach either year 4 or year 1. R1 chose to teach year 1 so that she could learn more to understand her students and assist students with learning difficulties. R5, on the other hand,

requested her school management to assign her to teach classes for low-achieving students (The interview was done in December 2017. The researcher was informed that starting the year 2018, all schools in Malaysia were instructed to stop streaming their students according to test scores). Malaysian highly academically competitive culture, in a way, has discriminated students with learning difficulties. R5 claimed that she was convinced that it is her responsibility to help her students. R5 believed that many low-achieving students in her school have potential to be successful if they receive the right support and hope that by being assigned to low-achievers' class, R5 could initiate the changes.

For the same reason, R11 expressed her intention to provide an equal learning opportunity. In previous findings of teachers' opinion on the education system, the researcher was informed that teachers were pressured by the parents and education authority's demand to ensure the students can produce good academic results. Hence, R11 determined to ignore the demand from the authority that evaluates teachers' performance by their students' academic attainment in order for her to create an equal learning opportunity.

Chapter 6: Findings Analysis: Message Framing

The presentation of the findings in this chapter addresses the third research question – How are the messages framed to trigger the participants' awareness and learning about dyslexia? It is worth to remind that the aim of the study is to identify the messages that trigger the participants of the study to learn about dyslexia and understand how it works; not to study about the participants.

Message framing is a device that facilitates information organization (Gitlin 1980) to make the audience more salient in communicating with the message (Entman 1993). Framing of messages influences the audience in decision-making. There are two levels of social construction according to the framing theory (Goffman 1974): the perception of the phenomenon by the presenter; and the interpretation of the audience. This study focuses on the latter. In the following section, the findings of the triggering messages framing analysis are presented. As all three artefacts were videos and movies, the framings of the triggering messages were analysed as the story framing. According to Hallahan (1999), story framing consists of:

- i. Key themes/ ideas that focus on the message.
- ii. Narrative techniques that support the themes.

In order to understand the key themes that concentrate on the messages, the content, or the script of the artefacts was first analysed. The literary and the multimedia devices of the mainframes were then analysed in order to understand the narrative techniques that support the themes.

6.1 Analysis of the Artefacts' Content

The pattern of the key themes could be recognised by clustering the script. These clusters of messages are also known as frames. Before the analysis, the researcher, with the help of dyslexia experts, identified the universal themes of the online dyslexia awareness campaign adopted by two dyslexia associations (BDA and IDA). The themes are:

- i. Definition of dyslexia (What is dyslexia?)
- ii. Characteristics of dyslexia (common traits – What is it like being dyslexics)
- iii. The spectrum of SpLD (other learning difficulties related to dyslexia)
- iv. Positive highlights of dyslexics (story of successful dyslexics and abilities of dyslexics)

The themes mentioned above could be presented as a message to raise audience awareness; encourage identification; or/and inspire intervention. The content of the artefacts was reckoned

based on the duration of the scenes that contributed to the meanings of dyslexia awareness, identification, and intervention messages. Scenes that characterised cinematographic transitions which did not contribute meanings related to dyslexia messages were not counted in the analysis. Refer to Appendix L for the data and the framing analysis process. The total duration of each artefacts are as follows:

V1 – 408 seconds of 426 seconds.

V2 – 378 seconds of 390 seconds.

V3 - 7790 seconds of 9302 seconds.

6.1.1 V1 – Dyslexia Explained: What Is It Like Being A Dyslexic?

The analysis of V1 script shows that the story plot began with a list of difficulties faced by dyslexics in class such as difficulty in copying down notes; confusion with sequences (73 not 37); and fear to read aloud [start 00:09] [end 00:48].

The scenes continue displaying Tom's learning difficulty, but in a different setting, that was Tom's home. Besides introducing the audience with the other set of common dyslexia traits (difficulty with spelling and writing), the setting also contributed to a significant interpretation. At home, Tom had to do his school work alone without any help. Thus, homework that was only meant to take 30 minutes to finish took him the whole evening [start 00:52] [end 01:17].

Although behavioural traits are the secondary symptoms of dyslexia, the patterns of the behaviour are easier to be identified compared to the cognitive traits. The next scene shows how Tom had mischievously created a reason to avoid school [start 01:17] [end 01:43]. Truancy is one of the common effects of dyslexia because dyslexic students try to avoid situations that embarrass them. This dilemma of being a dyslexic is worst if the teacher himself misunderstands the student's learning difficulty as an attitude problem. Hence, the student is labelled as stupid and lazy [start 01:49] [end 02:52].

The introduction to dyslexia came later after the audience was presented with the problems and the effects of being dyslexic. At this point, when the term dyslexia was introduced, the audience had already known what dyslexia is all about. The audience was overwhelmed with sympathy towards Tom, the dyslexic student. Mr. Teasewell's behaviour and ignorance had increased the audience's anger towards him. The next scene displays two different teacher characters: Tom's mum's friend and Mr. Teasewell. Tom's mum's friend seemed to have more knowledge about dyslexia than Mr. Teasewell. She was able to suggest Tom's mum take Tom for a dyslexia test compared to Mr. Teasewell who assumed that it is typical for a boy at Tom's age to be lazy and reminded Tom's mum not to label Tom as dyslexic [start 02:52] [end 03:31].

After the introduction of dyslexia, the next scene, V1 introduces how dyslexia test is run. The term Specific Learning Difficulties was also introduced but was not explained in detail. Even though how the test is conducted was not explained, the psychologist character (named Dr. Simon Collyjist) explained the test and justified that dyslexia is not a mental retardation issue [start 03:34] [end 04:43].

The positive highlights of dyslexics in V1 were described in the form of information about successful dyslexics such as Leonardo da Vinci, Albert Einstein, Richard Branson, Keira Knightley, and Benjamin Zephaniah. Dr. Collyjist also claimed that “not all dyslexics are hyper-talented geniuses, many are just ordinary people.” This information takes place in the scene where Dr. Simon Collyjist explained to Tom and Tom’s mum to reduce their anxiety about Tom being a dyslexic [start 04:53] [end 06:05]. Dr. Simon Collyjist then continued by telling them about the intervention in the next scene [start 06:05] [end 06:35]. The audience was given the idea that dyslexic needs extra lesson but in the form of playing games, which is a lot more fun than Mr. Teasewell’s lessons.

The story ends with the scene featuring Mr. Teasewell’s regrets [start 06:40] [end 07:06]. Mr. Teasewell expressed his regrets by summarising Tom’s problems and the teaching intervention that Mr. Teasewell had planned to carry out for Tom in the future.

6.1.2 V2 – Dyslexia: A Hidden Disability

The analysis of the script shows that V2 begins with a question about the feeling of being a dyslexic in the scene – which can be referred in Appendix 2 [start 00:01] [end 01:14]. In this scene, V2 introduced several successful dyslexics who were among the professionals and celebrities. These professionals and celebrities described their difficulties with reading and their experience having anxieties going through school [start 00:09] [end 01:21].

The theme from what is like being a dyslexic has been smoothly transferred to the definition of dyslexia as Dr. M. Cosgrove explained that his date, who was a school teacher, finally told him that he is dyslexic. A prominent scholar then defined dyslexia in the discipline - Dr. Sally Shaywitz, the co-director of Yale Center for Dyslexia and Creativity [start 01:21] [end 01:28]. Dyslexia is defined as a hidden disability as the signs are invisible.

The interviews continued with dyslexics, who explained their reading difficulties. Besides the professionals and celebrities, the interviewees included students from Westmark School, a private school which attends the needs of students with dyslexia. The dyslexics described how they see words that swirl around; and look like a bunch of foreign code [start 01:28] [end 01:45]. The

definition of dyslexia continues with the affirmation of the claim made by dyslexics that they experienced difficulties in reading [start 01:46] [end 02:35]. The interview also included a parent of a dyslexic child who had to witness his child fell into depression due to dyslexia [start 02:35] [end 02:44]. This scene shows that it is not only the child that will be affected by this problem; the parents are profoundly affected as well.

Hence, in the subsequent scene [start 02:44] [end 04:34], the importance of early identification carried out by caring teachers has been emphasised. As dyslexia is related to reading and learning, it is crucial for teachers to master the dyslexia identification skills. The interview scene with Mr. Watkinson [start 04:36] [end 05:03], a teacher at Westmark School, was the scene that marks the central theme of the whole V2 production – to promote the advantages of studying at Westmark School which is a private school compared to public schools as highlighted by Mr. Watkinson. The remaining scenes [start 05:03] [end 06:30] feature the interviews with the school's headmaster, Mr. Meredith and one of the teachers, Mr. Watkinson who spoke about how Westmark school had helped students with dyslexia succeed in their education.

6.1.3 V3 – Taare Zameen Par

The analysis of V3 script indicates that this Hindi movie was framed on multiple issues and situations which can be divided into twofold. The first primary setting of the movie focuses on the daily life of Ishaan, a dyslexic child before he was sent to a boarding school; and the second set features Ishaan's life at a boarding school. V3 also presents both, the problem (what is it like being a dyslexic) and the solution (identification and intervention).

In the first setting, V3 begins by describing what is it like being a dyslexic; the common traits of dyslexia; and the implication of dyslexia to the child in school [start 00:00] [end 09:01], family [start 09:02] [end 12:09] and community [start 12:09] [end 15:51]. The subsequent scene is the hint to the setting transition in V3 [start 15:52] [end 16:26] in which Mr. Awasthi (the father) warned Ishaan that he would face the consequence of being sent to a boarding school if the father received any more complaints from school or neighbours. The scene continues with the daily routine of the family [start 16:27] [end 20:54].

The scenes then return to school in which common dyslexia traits were introduced [start 21:23] [end 45:04]. The common traits presented in these scenes were seeing dancing letters, fearing of reading aloud, being the class clown and being punished by teachers most of the time [start 21:23] [end 33:10]. The other common traits such as the tendency of making mistakes with spelling and writing, being forgetful and lack of concentration were presented in the scene when Ishaan's mom checked his school works [start 33:11] [end 35:14] and the tendency for truancy in

the scene where Ishaan asked his brother to write an absent note for his teacher so that he could escape school [start 35:17] [end 37:01] as well as in scenes [start 41:47] [end 43:50]. Dyscalculia (problem with numeracy), one of the dyslexia spectrums, was portrayed in the scene [start 37:33] [end 40:06]. A scene [start 37:37] [end 40:19] that portrays what happened in a dyslexic brain when solving a mathematics question had left a remarkable impact on R12. Dyslexia common traits were then summarised by the head teacher in the scene [start 44:01] [end 45:04]. At this point, the head teacher admitted that the school could not help Ishaan anymore. The head teacher suggested that Ishaan may have a learning problem and needed special school [start 45:04] [end 45:38]. Ishaan's father could not accept the head teacher's recommendation and respond negatively. A special school in Indian culture is associated with mental retardation. Hence, Ishaan's father refused to accept the head teacher's recommendation. He believed that Ishaan was not given enough attention as there were sixty students in the class. Therefore, a child such as Ishaan needs a better school such as the boarding school in which he is believed to receive more attention [start 45:37] [end 49:39].

The second set of V3 takes place at the boarding school [start 50:50] [end 154:22]. It begins with a scene that shows Ishaan was sent to the boarding school as a punishment for being a stubborn and wild child [start 50:50] [end 55:54]. Ishaan's lesson in the boarding school starts in scenes [start 57:04] [end 70:52] in which the audience was given the same perspective as what had happened in the previous school. It shows that Ishaan was still having the same problem and was referred to as idiot, duffer, lazy, and crazy [65:26]. Scene [start 68:44] [end 69:33] shows that Ishaan's self-esteem had deteriorated – a common secondary effect that could be identified via a dyslexic child's behavioural traits. From a happy child, Ishaan had now turned into a quiet and sad child. Scenes [start 50:50] [end 70:55] repeat the messages displayed in the first set however the description of the common problems contributes to the definition of dyslexia rather than explaining what is it like to be dyslexic.

The turning point of Ishaan's life begins when a substitute teacher, Mr. Nikumbh, took over Ishaan's art class. The scenes [start 70:56] [end 80:21] introduce a new teacher who had a different character and different teaching approach. Unlike in the previous setting, the second setting directs the audience to view the situations or the problems from the voyeur point of view that is the audience's perspective. The opening scenes include the description of the problems that surround a life of a dyslexic in order to maintain the audience's awareness as well as to give the audience a hint of a change that would happen in the succeeding scenes. Scene [start 78:43] [end 80:21] shows that Mr. Nikumbh had started to notice Ishaan's problem. This scene marks the transition of the message frames from awareness to the identification. Meanwhile, scenes [start 80:50] [end 82:42] show that Ishaan had stopped talking to his family – his emotion was severely

damaged. Nonetheless, Mr. Nikumbh's supports for Ishaan [start 83:19] [end 154:22] has proven that dyslexic learners can learn if the teachers have the right skill to support dyslexic learners. It starts with the teacher's ability to identify the learner's difficulties [start 86:02] [end 90:19]; and provide the support by informing the parents [start 96:44] [end 107:09] and support the learner's learning [start 109:02] [end 154:22].

There are overlapping frames used in the second set of V3. For example, within the identification frames [start 86:02] [end 107:09], the scene [start 96:44] [end 107:09] where Mr. Nikumbh went to visit Ishaan's parents consists of two different contents: identification and awareness. As Mr. Nikumbh interviewed Ishaan's parents, he also explained what dyslexia is. The questions that Mr. Nikumbh asked the parents contain a list of common dyslexia traits which were used to help him to identify Ishaan's problem. Mr. Nikumbh later explained several other dyslexia common traits to Ishaan's parents, but they were meant to send awareness messages to the parents as well as to the audience.

The intervention frames in V3 include the teacher who had inspired the learners with successful stories of dyslexics [start 109:34] [end 114:16]; applied multisensory teaching approach [start 123:05] [end 126:48]; and created opportunities within his/her means [start 119:19] [end 149:15]. It is interesting how the 'positive highlight of dyslexic' theme was applied as an intervention tool rather than an awareness tool as it was used in V1 and V2. Instead of describing successful dyslexics to raise the audience's awareness, in V3, the theme was to raise the students' awareness (which indirectly inform the audience of the potential too). By telling the success stories of dyslexics, Mr. Nikumbh hoped that Ishaan and other his students would appreciate the 'famous misfits' and the depressed Ishaan would gain new hope. V3 has a happy ending. It indicates that a teacher can make a difference in the life of a dyslexic child [start 147:56] [end 154:22].

6.2 The Narrative Techniques Supporting the Themes

A narrative technique is a strategy used to convey messages to the audience (Orehovec and Alley, 2003). In this study, two aspects of the narrative supporting devices- literary and multimedia- were analysed:

- i. Literary devices - situations, attributes, choices, actions, issues, responsibility and news.
- ii. Multimedia devices –
 - a. Visual - text; montage; camera angle; facial expressions; gesture.
 - b. Audio – background music; voice over; sound effects

6.2.1 Analysis of Literary Devices

Six out of 7 models of frame applicable to public relation by Hallahan (1999) was utilised in the analysis of the literary devices.

Situations (Relationships between Individuals in Situations Found in Everyday Living)

The most significant situation employed in both V1 and V3 is the student-teacher relationships. V1 framing of situation demonstrates that the narration of V1 is centred on the student-teacher relationships which revolve around the classroom's daily activities. Within that situation, the student's learning difficulties were displayed during and after school hours. More importantly, the ignorant teacher character - Mr. Teasewell - in V1 added onto the miserable school experience of a dyslexic student which increases the audience's empathy towards dyslexics' difficulties. This situation allows the participants to relate themselves with the characters and has brought them to feel what it like is to be a misunderstood dyslexic student. In V3, the teacher-student situations were divided into two mainframes: the ignorant teachers- dyslexic student situation and the fully aware teacher-dyslexic student situation. The student-teacher relationships were also represented in V2 but only within 28 seconds airing time at scenes [start 2:13] [end 2:32] and [start 5:27] [end 5:36]. This is not sufficient to allow the participants to identify themselves with the situation. However, the participants were able to evaluate the experience of the dyslexic by listening to the dyslexic sharing their difficulties in reading and learning as well as from the interview with a dyslexia expert who explained dyslexia conception.

Besides the situation depicting student-teacher relationships, the situation that frames parents–student relationship was also seen in V1 and V3. V1 showcases the effort of a caring mother who finally managed to get her dyslexic child to be diagnosed by the professional; whereas V3 showcases an ignorant father who despite being the hero became the villain and a helpless mother who could not save her child. There is also a situation in V2 in which a mother, during the interview, mentioned her worries of 'losing' her child due to depression.

Another critical situation is the dyslexia diagnosis process, which was explained almost explicitly in V1, indirectly in V3 and none in V2. In V1, the participants could not identify themselves with the psychologist character but rather to the situation. While viewing the scenes, the participants evaluated the dyslexia diagnosis process, which was explained by the psychologist orally and the simulated diagnosis process.

While discussing the detailed analysis of the situations framed in V1, V2, and V3, it is essential to draw the attention of the readers to the subject positioning the participants in relationships with the situations. There are two positions that the participants could associate themselves with the artefacts: relationship with the artefacts and the relationship to the artefacts. The participants associate themselves with the artefacts when they could identify themselves with the characters in the artefacts. On the other hand, when the participants view the artefacts and then evaluate and judge the messages, the participants build a relationship with the artefacts (Carboni 2007). V1 and V3 are narrated in the form of a story with plots and characters that shape the situations. While viewing V1 and V2, the participants acted as a voyeur who sees through the characters. In contrast, V2 is narrated in the form of an interview where the participants evaluated the messages via the interviewees' speeches. Hence, V1 and V3 allow the participants to identify themselves in the characters, while V2 keeps the participants' position distant from the character.

Attributes (Accentuated Characteristics of Object or People)

The ignorant teacher is the focal attribute in V1's message that triggers all teachers (15 of 15) to learn more about dyslexia identification. The conflict between the teacher and the students was raised by accentuating the student is suffering as an impact of an ignorant teacher, named Mr. Teasewell. Moreover, there is a particular scene that shows that the dyslexic student's mother, to discuss the child's difficulties with Mr. Teasewell, was told not to worry about her child unacceptably.

While both V1 and V3's processing of information is biased on depicting how it is like being dyslexic, the focal attributes of V1 and V2 are different. V1's focal attribute is the ignorant teacher while in V2, it is the suffered dyslexic student. The student's relationship with the teachers and the parents creates a massive impact on the participants' empathy towards the dyslexic. Since the torture received by the dyslexic in V3 doubled from that received by the dyslexic in V1, the focal point was positioned on the victim compared to the villains. Besides, in V3, the participants' anger was distributed towards both, the ignorant teachers and ignorant parents. In V1, the participants' anger was directed solely towards one villainous character that is the teacher. Moreover, the participants had to identify themselves as two different teacher characters and as a parent at the same time while watching V3. In between the two teacher characters, the participants could opt to associate themselves with either the ignorant or the caring teacher.

In contrast, the successful dyslexics interviewed are the focal attribute of V2. These dyslexics are professionals such as the professor of surgery from Yale medical school; chief paediatric emergency medicine; attorney; actress/writer/producer; heart surgeon and filmmaker. Compared to V1 and V3, which only lists the names and pictures of successful dyslexics, V2 presents the real-

life successful dyslexics talking about their own experience of being dyslexics. The common famous dyslexic mentioned in all three artefacts is the scientist and inventor, Albert Einstein. Compared to V1 and V2 that utilise the situation as the primary literary device, V2 utilises attribute (people object) as its primary literary device.

Choices (Posing Alternative Decisions in Either Negative (Losing) or Positive (Gaining))

Framing of choices guides the audience to make a decision. Two significant impacts that are typically framed are the prospect of loss and prospect of gain. The prospect of loss is represented by messages that warn of risks; while the prospect of gain is represented by messages on benefits of a decision. Although all three artefacts convey both positive and negative messages, each of the artefacts posits different choice of the negative or positive valence of the event.

V1, via the ignorant teacher character, warns the audience of the consequences of being a dyslexia-ignorant teacher. The framing of the message begins with the scenes showcasing the teacher's bad attitudes towards the dyslexic student, followed by the scenes that explain the impact towards the student and ends with the scene that confirms the teacher's guilt for being ignorant. In between the scenes, there are positive messages about dyslexia identification and definition. While explaining dyslexia identification and definition, the psychologist character in V1 gave the affirmation of dyslexics' ability to learn. However, the positive messages were framed as supporting ideas that enhance the blame on the ignorant teacher. The main message to the audience is an ignorant teacher is the main reason for dyslexic students to be misunderstood, marginalised, and unsupported in learning.

The primary framing of choice for V2 is to highlight the benefit of sending dyslexic students to a private school named Westmark, where dyslexic students are given the right learning support. Despite revealing Westmark School's secret teaching and learning intervention, V2's framing of messages focuses on convincing the audience of dyslexics' ability to succeed by featuring professionals and famous dyslexics. The main message of V2 is to convince the audience that with the right learning support, dyslexic students could excel in academic and succeed in life. V2's framing of choice aims at providing positive valence by setting the audience's choice to be informed rather than ignorant.

V3 provides the audience with mixed choices. The first half part of the movie displays risks and negative impacts towards a dyslexic child as a result of ignorant teachers and parents. However, in the second half part of the movie, the audience is presented with hopes. By featuring a knowledgeable and caring teacher who came into the child's rescue, the audience was given some hints on multisensory approach for teaching and learning intervention. The second half of the

movie offers the audience the definition of dyslexia; the highlights on the dyslexics' potential to succeed; and the teaching and learning intervention. V2 begins with negative framing of choice by featuring bad teachers and bad parents which create the feelings of anger and sad but ends with positive framing of choice by featuring a good teacher with dyslexia identification and intervention skills that relief the audience's negative feelings.

Actions (Probability That Persuade a Person to Act)

V1 contains a straightforward message that encourages the audience to be an informed teacher or parent. An informed teacher or parent would be able to identify the child's problem; send the child for diagnosis; and support the child in learning. The main persuasive idea of V1 is to inspire the audience to master the identification skill – to know the problems and the characteristics of dyslexia so that they could be sent for diagnosis.

V2, too, contains a straightforward message. V2 encourages parents to send their dyslexic children to schools that could accommodate the dyslexics' learning needs, such as Westmark School. With proper accommodation and learning support, dyslexics could become a successful person in career and life. V2's main persuasive idea is to enhance the parents' belief that right learning intervention – supports and facilities – is the key for dyslexics to succeed.

V3, however, contains two important messages. V3 encourages the teachers and parents to be aware of dyslexia problem; and also highlights the impacts of being ignorant teachers and parents to a dyslexic child. At the same time, V3 demonstrates to teachers how to teach dyslexic students. V3 persuades the teachers and parents to learn about dyslexia identification, and teachers to learn about dyslexia intervention as well.

Issues (Social Problems and Disputes)

The three artefacts raise the common issue of dyslexia ignorance, which causes dyslexics to be misunderstood and marginalised. If teachers and parents could not manage the learning difficulty, dyslexic learners' education and psychology will be detrimentally affected. In the education aspect, dyslexics would not be able to receive the right learning support, which later affects their academic performance and their rights for education. As a result of years of failure, dyslexic students will be depressed and exhibit behavioural troubles.

One of the issues addressed by all the three artefacts is that dyslexia is a hidden difficulty that leads people to misunderstand dyslexic as being stupid and lazy. V1, V2 and V3 address this issue by justifying why dyslexics have difficulties to read. Since dyslexia is difficult to be identified, V1

and V3 list common characteristics of dyslexia. In addition, as the latest dyslexia awareness campaign holds the theory of Neurodiversity, all the artefacts in this study point out the positive highlights of being dyslexics such as the dyslexics' capability of thinking-out-of-the-box. V2, especially gives an emphasis on sending the audience the message of the potential for dyslexics to be successful people.

With its Asian background setting, V3 portrays two common important issues: the issue of special need school for dyslexics and the issue of reading and written-based examinations. Dyslexia misconception as a form of disability leads most Asians to believe that dyslexics could not learn in mainstream school. In Malaysian context, dyslexics – if not sent to special need school, should be sent to vocational school because of their inability to follow the heavily cognitive load education system applied in mainstream school. Scene [start 1:59:46] [end 2:0:44] highlights the misunderstanding. The script is as follow:

Teacher: No Sir, he's a bright boy. He just has a little problem with reading and writing...

Head teacher: Then a special school is the right place for him.

Teacher: No sir, he's a child with above- average intelligence. He has every right to be in normal school... The education for all scheme gives every child this right. It's another matter that very few schools follow it.

Another most important issue among Asians (including Malaysia) is the issue of grade-oriented culture. In most Asian countries, a student is always evaluated based on their grades. The examinations, either at the national or school level, are pencil-and-paper-based which test students in the forms of reading and writing. Hence, in V3 scene [start 2: 02: 29] [end 2: 02: 41], the teacher character asked the students to be tested orally for the time being.

Responsibility (Attention to Roles)

There are two significant roles emphasised in the three selected artefacts: the teachers and the parents. However, each artefact puts different weights on the importance of the roles and the responsibility of the teachers and parents. V1 highlights the roles of a teacher more than a parent; V2 emphasises on the parents' role and responsibility to send their children to the right school; and V3 stresses on the roles of both teachers and parents.

News (Culturally Resonating Issues)

The news frame is frequently used to feature trending events around a particular culture. The news frame is usually utilised in journalism; not applicable in the studied artefacts.

6.2.2 Analysis of Multimedia Representations

It is important to emphasise that the primary purpose of analysing the multimedia representation of each artefact is to understand how the multimedia devices support the delivery of the messages. This could be achieved by indexing the visual features of the key-frame that capture the significant shots. While it is not feasible to index all shots, only shots that contribute to the key-frame of each artefact were analysed and presented. The previous analysis of the artefacts content and literary devices revealed that 69.3 percent of V1 and 53.13 percent of V3 focused on the dilemma faced by dyslexics; and 40.74 percent of V2 on dyslexic's ability to succeed. Hence, this section is divided into two parts:

- i. Multimedia analysis based on scenes on the dilemma faced by dyslexics in V1 and V3; and
- ii. Multimedia analysis based on scenes on dyslexic's ability to succeed in V2

Scenes on Dilemma Faced by Dyslexics in V1 and V3

V1 begins with a question inviting the audience to explore what it is like being dyslexic. The question was left for the audience to view within 4 seconds before Tom, a dyslexic student, was introduced [start 0:00] [end 0:09].



Transcript

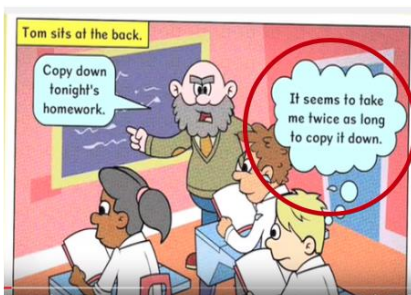
00:01

Narrator: what's it like being dyslexic at school

00:06 (background sound – bell ring)

Tom: Oh! Oh! Gonna be late!

Then, the scenes continue by listing out several common difficulties or dilemma experienced by dyslexics [start 0:09] [end 2:27].



Transcript

00: 09

Narrator: At school

00:10

Narrator: Tom sit at the back.

00:14

Mr. Teasewell: Copy down tonight's homework.

00:17

Tom: It seems to take me twice as long to copy it down

V1 is an animated video comprises of still images. In describing the difficulties, V1's producer relies on the visual images for facial expression, emotion, and moods. The intonation of the characters' voice-over, besides, facilitates the audience to understand the situation – such as sounds of anger, scared and tired. The shot below portrays Tom's numb face and sweat, which

exhibit Tom's anxiety. The use of thought-tracking throughout the scenes also helps to remind the audience of Tom's inner thoughts, which highlight the torment experiences that Tom had.



Transcript

00:20

Mr. Teasewell: Everyone finished? Right, turn to page 73

00:23

Everyone else has but I haven't finished yet. If I say anything I'll look stupid.

00:33

Classmate: He said 73, not 37! Why don't you listen?

Another visual technique utilised to enhance Mr. Teasewell's anger is the animation application. Even though the images are not alive, the use of camera angle – zooming into Mr. Teasewell's facial expression can send the signal of emotion as in the shots shown below. The voiceover that sounds like Tom with his sore throat could help the audience to imagine the situation better.



Transcript

00:36

Mr. Teasewell: Tom! Read from the top of the page.

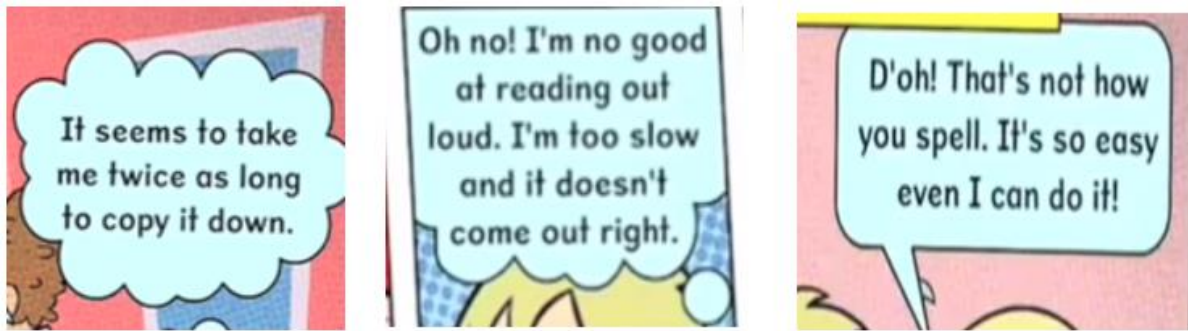
00:38

Tom: Oh no! I'm no good at reading out loud. I'm too slow and it doesn't come out right. I can't sir, I've got a sore throat.

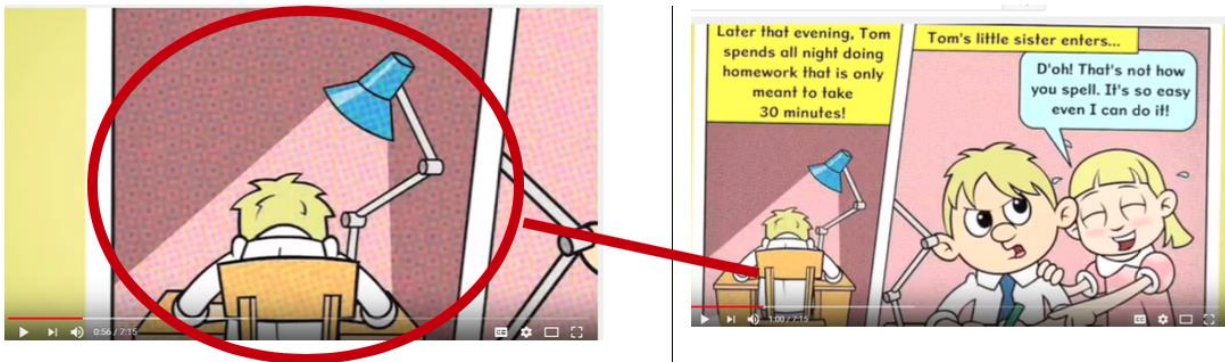
00:50

Mr. Teasewell: Oh no! NOT AGAIN (background sound – roar)

One of the advantages of using the still images is that the creator could add some notes in a textual form that appear for several seconds. The audience could read the notes to help enhance their understanding of new knowledge. These notes work like sticky notes or post-it notes.



The list of common problems continues with scenarios that happen at home. The shot that shows Tom's back creates a sense of peeping through Tom's door, as the audience witness Tom's effort in finishing his homework. This moment is recorded by zooming in the scene from its bigger image for 5 seconds. The use of the lighting image that comes from the study lamp, instead of helping Tom to do his homework helps the audience to see Tom.



Transcript

[Start 00:53] [End 00:58]

Narrator: Later that evening, Tom spends all night doing homework that is only meant to take 30 minutes

Despite Tom's hard work, he still could not get things right at school. The scenes below describe Tom's frustration. Because the duration gap between the scenes that capture Tom spending time doing homework [above] and the scenes that show Tom's effort of going to the drain [below] is short (27 seconds), the audience was able to relate the meaning.



Transcript

01:49

Narrator: at school Mr. Teasewell is not impressed with Tom's homework

01:53

Mr. Teasewell: What do you care less you lazy boy.

01:57

Tom: I spent ages on that. What's the point?

Narrator: Today it was Mr. Teasewell spelling test.

02:06

Mr. Teasewell: Spell blah blah blah blah blah

02:10

Narrator: Tom copied from his friend. Everyone had to read out their scores.

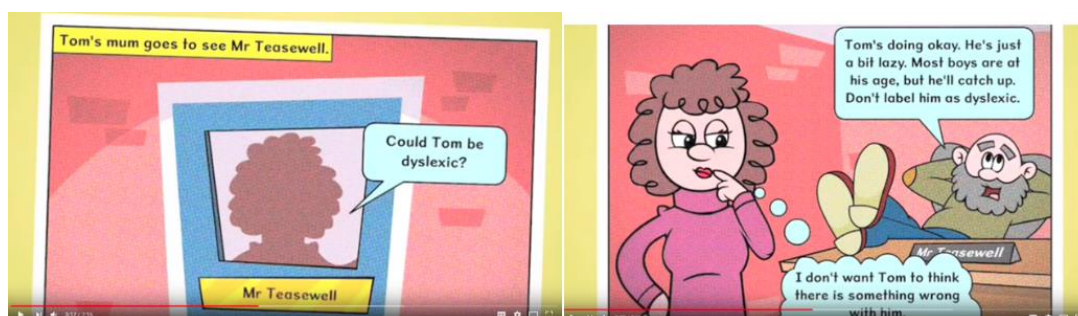
02:17

Students: 18 out of 20 19 out of 20 20 out of 20.

02:27

Tom: Huh! Zero out of 20 ah! I couldn't even copy and get it right

The narration continues with scenes that show Tom's mother's concern, and later, she approached Mr. Teasewell to discuss the possibility of Tom being dyslexic. The next shot emphasises Mr. Teasewell's villainous character. With his legs on the table, this shot depicts that Mr. Teasewell did not even respect Tom's mother.



It is worth to compare the scene that conveys messages on intervention (above) with the scenes that convey messages on identification (below) in order to understand the implication of the dyslexic's dilemma awareness messages towards the audience (key-message frame for both V1 and V3). There are two intended implications: teachers' inquiry about dyslexia identification and intervention. The analysis of the scenes on dyslexia identification in V1 includes the identification process, definition of dyslexia, and the strengths of dyslexics.

Transcript

04:23

Psychologist: Tom has a specific learning difficulty. That's just another name for dyslexia. It's called that because every dyslexic is different. Everyone has things they're good and bad at.

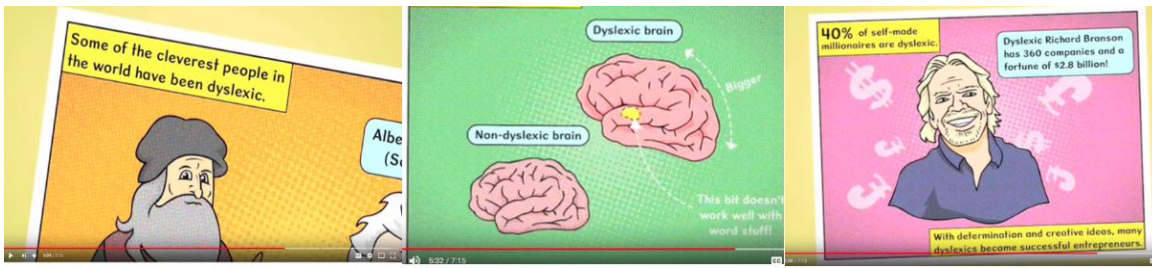
04:36

Tom: Oh what is wrong with me?

04:40

Psychologist: There's nothing wrong with your brain. You just use it differently. That is why school is so hard. You just need to be taught by using your learning strengths. Some dyslexics are good at art, others are good at design, technology, sport or drama. Perhaps you haven't found out what you're good at.

Most shots are dedicated to highlight the strengths of dyslexics.

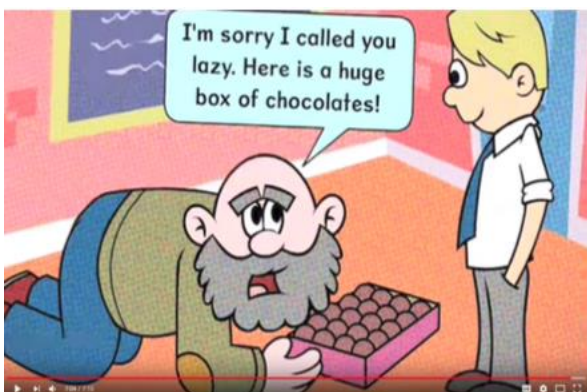


Transcript

05:33

Narrator: dyslexics have bigger brains. 40% of self-made millionaires are dyslexic. Dyslexic Richard Branson has 360 companies and 2.8 billion dollars. With determination and creative ideas, many dyslexics become successful entrepreneurs. Dyslexics are often creative.

The situation that highlights the relationship between an ignorant teacher and his dyslexic student ends with Mr. Teasewell's regret, and he promised not to make Tom do things that would cause difficulties to Tom such as reading aloud. However, unlike the other scenes (including the subsequent scenes on identification) where every important point was textually printed on the screen, the ending scene below containing a list of things that a teacher should do to support their dyslexic students as part of the intervention is not textually listed on the screen. The audience was only told (in audio) of what Mr. Teasewell had promised to do (refer to the script attached with the shot).



Transcript

06:40

Narrator: Mr. Teasewell apologizes.

[start 06:40] [end 07:06]

Mr. Teasewell: I'm sorry I called you lazy here's a huge box of chocolates. I promise not to make you read aloud; should not expect you to write as much and to give you a printout of homework questions; that I'll make sure you understand. Things will get better from now on

It is also unfortunate that there are only three shots available to convey the message about dyslexia intervention. Besides the shot showing Mr. Teasewell acts of regret, the shots showing the extra support needed by dyslexics below was an implied message on intervention. Unfortunately, further information on the support is not available.



Transcript

06:20

Psychologist: You will have to work harder than others while you're at school. That will mean extra lessons but taught in a way you learn.

06:26

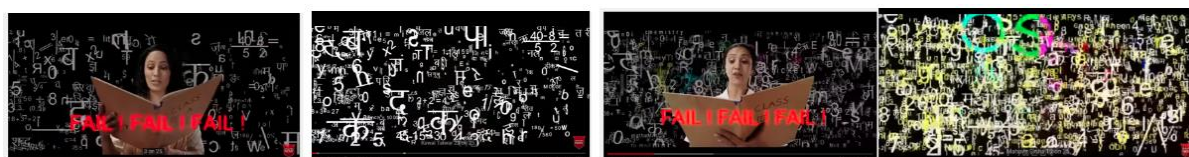
Tom: Oh! No! Extra lessons

06:31

Narrator: Tom does have extra lessons but he plays games and learns quickly so it doesn't seem so bad

V1 and V3, both utilise teacher-student situation as the central of dyslexic dilemma. Nonetheless, in V3, the audience's anger towards the ignorant teacher characters was reduced by overlapping the ignorant teacher characters with the characters of ignorant parents, as well as, the caring teacher character. These overlapping situations reduce the audience's anger towards the ignorant teacher because it shows that not only the teachers could be ignorant, but also the parents. Due to the parents' ignorance, the ignorant teachers were indirectly forgiven. The audience's attention, therefore, was more likely directed towards the caring teacher character, who is a unique character in the movie. Instead of feeling angry towards the ignorant teachers and parents, the audience became curious with the knowledgeable teacher's teaching intervention. Hence, the exciting scene depicting dyslexics common characteristics [as reflected by the participants] focuses on understanding the dyslexic's mind difference leads to the caring teacher's teaching intervention [as new knowledge to the audience].

At the beginning of the movie, the audience was introduced with Ishaan's, the dyslexic student character in V3, who failed academically. The background of each teacher announcing the examination scores was the simulation on dancing letters seen by dyslexics. The background music also contributes to the feeling of tense.



Further, in the next scenes, the audience was reminded of the dancing letter and how that visual problem caused difficulties for dyslexic to read. The following shots show that the dancing letters

excuse had caused Ishaan, the dyslexic student character, troubles in class. The fierce teacher character who scolded and reprimanded Ishaan had caused the audience to sympathise Ishaan.



Transcript

23:32

Teacher: Just read the sentence for me just read the sentence

23:26

Ishaan: (said something in Hindi)

23:41

Teacher: Speak in English

Ishaan: The letters are dancing

23:48

Teacher: Yeah dancing are they? Okay then read the dancing letters! Trying to be funny. Read the sentence loud and proper! I said loud and proper, Ishaan. Loud and proper! Loud and proper!

24:12

Ishaan: (Read gibberish out loud.)

24:18

Teacher: Stop it! Stop it! Enough is enough! Get out of my class! Out!

The simulation is repeated in scenes [start 1:03:01] [end 1:03:57] at the different venue when Ishaan was already sent to a boarding school where his father thought Ishaan could be trained to be more disciplined. Compared to V1 that employs still images, V3 is at an advantage because it is a movie in which motion-related information is more vivid. Hence, messages on dyslexic's visual problems and creative thinking could be easily visualised by the audience. This could help the audience to see from the eyes of dyslexics. Prior to the visual problem, the scene was a scene where one of the teachers explained some grammatical definition and asked Ishaan, "Have you got it, Mr. Ishaan Nandkishore Awasthi?" [1:03:18].

Even though these scenes are presented as a montage, the voiceover of the teacher embedded in the montage [refer to script 1:03:33] facilitates the audience to relate why Ishaan was thought to be a dumb learner.



Transcript

1:03:33

Why? Why can't you? Idiot! Why can't you? What's the problem? Why are you so dumb?

Another simulation that indicates a dyslexic brain works differently is displayed in the scenes where Ishaan and his classmates were given a math test. The following shots show that Ishaan solved the mathematical problems differently.



Transcript

37:35

Teacher: Surprise maths test. The marks on this test will count in the final exam, so be careful. Take one and pass the rest. Here.

(Ishaan stared at the questions)

38:33

Ishaan (voice over): Fearless Captain Ishaan sets out on mission impossible. His mission... to take the third planet from the Sun... Planet Earth and yank it "into" the ninth planet in the solar system... Pluto.

Three into nine. Goodness! Scorching hot Mars will melt captain Ishaan's firm grip on Earth. Saved! Hi Jupiter... bye Jupiter! Hi Saturn, having fun?... Bye. And now 3 gets ready to go into 9. Pluto is destroyed! It's no longer a planet. Fearless captain Ishaan has discovered the answer.

3×9 equals 3.

40:06

Teacher: Time up.

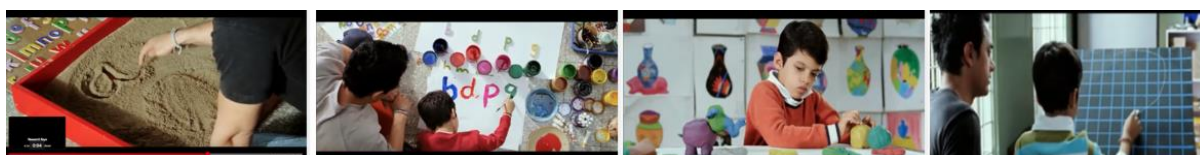
40:15

Friend: How did the test go?

40:19

Ishaan: No fear.

In contrast to V1, V3's intervention scenes are displayed longer (30.56 percent of total duration) than its identification scenes (16.26 percent of total duration). Hence, the implication for the awareness scenes which portray the dilemma faced by a dyslexic in V3 weights more in the intervention messages. The following shots [start 2:03:01] [end 2:05:04] show multisensory teaching approach (as teaching intervention).



The multisensory teaching approach scenes are presented in the form of a montage. There is background music - a happy melody which indicates a happy teaching and learning moment. However, there is no explanation related to the intervention except for the dialogue between the

teacher and the head teacher before the montage which explains that the teacher will be working on Ishaan's difficulty in reading and writing:

1:59:49

Teacher: He just has a little problem with reading and writing. You must know about dyslexia?

1:59:58

Head teacher: You've made it easier for me. I was wondering what I'd tell his father. He was referred by a trustee. Good... good. Then a special school is the right place for him.

2:00:12

Teacher: No sir, he's a child with above-average intelligence. He has every right to be in a normal school. All he needs is a little help from us.

2:00:50

Head teacher: Tell me how this boy will manage here. There's maths, history, geography, science, languages!

2:00:58

Teacher: He'll cope. With a little help from teachers.

2:02:26

Head teacher: What do you want from me?

2:02:29

Teacher: For the time-being, let his handwriting...his spelling be ignored. Let him be tested orally. Knowledge is knowledge, oral or written. Meanwhile, I'll work on his reading and writing. Gradually he'll improve.

The head teacher's perception of dyslexia as an abnormal mental condition [refer to script 1:59:58] could lead the audience to correlate what-is-happening-in-a-dyslexic's-mind scenes with what-is-happening-with-the-multisensory-teaching scenes. However, the audience was left to interpret the teaching technique via movie images without any textual or spoken explanation.

Scenes on Dyslexic's Ability to Succeed in V2

V2's key-frame is vested around the message on intervention. Via its interviewees as people objects, V2 gains its strength to convince the audience that with the right intervention, dyslexics could be a successful person. V2 begins with a question:

Transcript

00:01

Narrator: I wonder what it feels like the first time the child is sitting in class and suddenly discovers that he or she can't do with everybody around them is doing.

The question is answered by several dyslexics who were interviewed. The answers, however, are not as vivid as the interviewees' positions appeared on the screen. The audience could not clearly see how the interviewees felt when they said they 'had a terrible time reading'; 'felt different'; felt 'very disturbing'; and felt 'their mind different' [start 00:11] [end00:47] because the audience could only see their faces and positions when being interviewed –those images fail to deliver the interviewees' real feelings.



Transcript

00:11

Graeme Hammon: I had a terrible time reading my teachers school couldn't understand it they thought I was a bright student but I simply could not read



00:17

Karen Santucci: I always felt a little bit different going through school. I remember even at an early age having anxiety. I was never the one who would volunteer to read out loud or give a speech or go to a speech class.



00: 28

David Boies: You measure yourself against other children and when you can't read nearly as well as your classmates, it is something that is very disturbing.



00:37

Whoopi Goldberg: I knew as a kid there were a lot of things that were different. Just about how my mind seemed to work but you know when you're 7 or 8 you just thinking weird.

The shots above state the name, career and position of the interviewees: Graeme Hammon, MD, Professor of Surgery, Yale Medical School; Karen Santucci, MD, Professor/Chief, Paediatric Emergency Medicine, Yale; David Boies, Attorney/ Chairman, Boies, Schiller and Flexner, LLP; and Whoopi Goldberg, actress/performer/writer/producer. Although there was a question asked at the beginning of the video to guide the audience to listen to the interviewees' answers, the textual description of the interviewees themselves was more likely to capture the audiences' attention. Besides, the interviewees failed to elaborate on their feelings of being dyslexics. Hence, rather than enabling the audience to feel what it is like being dyslexic, V2 impresses the audience with the interviewees' career and position that indicate their success. It was later in shots [start 01:28] [end 01:45], Rose Love and Charles Schwab mentioned about visual problems and difficulty in decoding words. Similar to V3, V2 also employs motion related information. Hence, the audience did not have to visualise the swirling words on the black and white page because the moving images can demonstrate the audio description.



01:28

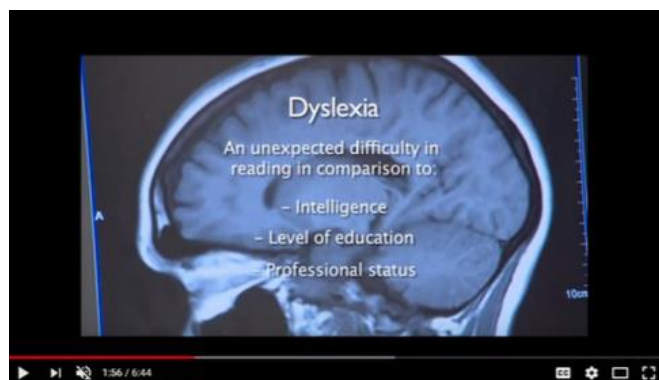
Rose Love: What happens is on the page there's so many words and then there's black and white so everything is just swirling around and I can hardly keep track.



01:37

Charles Schwab: I see a bunch of foreign code and so I have to go through each word to decode it and turn into sound in your mind and then of course that gives meaning.

The interviews were then followed by an interview with Sally Shaywitz, the Co-Director at Yale Center for Dyslexia and Creativity who defined dyslexia as an unexpected difficulty in reading in comparison to intelligence, level of education and professional status. The highlights on intelligence, level of education, and professional status indicate the focus of V2 in promoting dyslexics. Not only the points were well-delivered, but they were also textually visualised for 11 seconds in shots [start 1:47] [end 1:58].



Later, [start 03:21] [end 03:40] Sally Shaywitz emphasised repeatedly on the potential of being dyslexics rather than the dilemma of being dyslexics to remind the audience that it is important to provide the right intervention:

03:20

Sally: What we now know is you can be quite intelligent and still read very slowly. If you look at the top tier of any and in fact profession writers; people in cinema; physicians; Nobel laureates; attorneys; people in business and finance, there's a disproportionately high number of people who are dyslexic.

The highlights on dyslexics' intelligence and potential to succeed continue until shot 2:37. Shots [start 2:37] [end 2:44] work as a transition between the justification for the intervention scenes (by promoting dyslexics' potential to success) and the suggested intervention scenes (by marketing Westmark School). In the scenes [start 2:37] [end 2:44], Geralyn Lucas, a mother of a dyslexic child, spoke about her worries about her child who became depressed of her dyslexia. Geralyn's message act as a warning to parents who have dyslexic children.



Transcript

02:37

Geralyn Lucas: When I saw Sky and how depressed she was and how she thought she was dumb and she didn't believe in herself I just thought I was losing her.

The warning from Geralyn was then followed by a statement made by Westmark School headmaster, Muir Meredith who claimed that the discovery of dyslexia begins with a caring teacher; and supported by Whoopi Goldberg who assured that parents need teachers' help. The following scenes [start 2:44] [end 3:15] depicts the marketing for good school such as Westmark as the right dyslexia intervention.



Transcript

02:47

Muir Meredith: You know the discovery of dyslexia for a student and for their family is a drink. It begins usually with a caring teacher who says something like I think I see the problem and directs the parent to do assessment

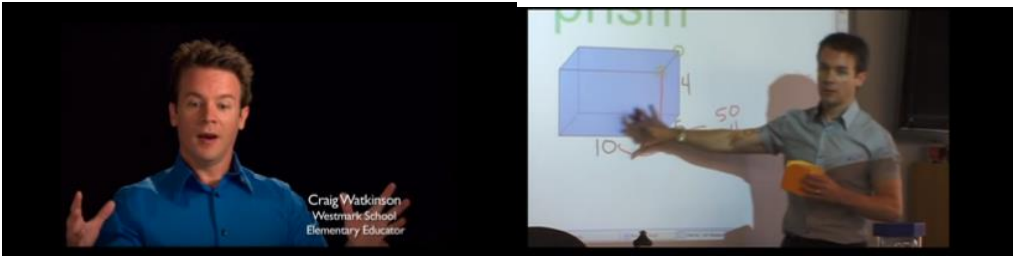


Transcript

03:03

Whoopi Goldberg: The truth is parents can catch a lot of things but you really don't know it until you in school because the teacher can watch you progress on a daily basis and if someone you discover may be dyslexic you go oh okay, you and I we got a journey.

The promotion continues with the accreditation statement by the teacher in Westmark school, Craig Watkinson, and supported by a school student of Westmark, Rose Love in scenes [start 04:34] [end 05:03]. Both, the teacher and the student agreed that in Westmark, dyslexic students are better accommodated mainly because the size of the class is small.



Transcript
04:34

Craig Watkinson: One of the things that is unfortunate with children in public schools is that because you have one teacher trying to organize a classroom with 35 students. You might even realize that that student is probably dyslexic that student might also be dyslexic but you simply in the course of your day are not able to give them the accommodations that they need and I think there's no more heart breaking than that.



Transcript
05:35

Rose Love: One of the big pluses that I always say whenever somebody asked me about Westmark is they have small classes so that the teacher really helps you in class on the specific thing you need help on

V2 ends with promoting Westmark school. The last few minutes display the Westmark school signage at shots 05:24, 05:48 and 06:32 to the end.



05:24



05:48



06:32 to 06:42

6.3 Summary of the Message Framing Analysis

This section summarizes the two main aspects of message framing analysis: the content analysis and the narrative analysis. The content analysis reveals each artefact's framing of messages on dyslexia awareness, identification, and intervention. The narrative analysis describes the literary and multimedia devices utilised in each artefact.

Overall, V1 features 4 minutes and 38 seconds of common dyslexia traits; 39 seconds of definition; 1 minute and 12 seconds of dyslexia positive highlights; 2 minute and 10 seconds of dyslexia identification; and 1 minute and 1 second of dyslexia intervention. In V1, the scenes that

feature common dyslexia traits are presented before the definition statement. Contextually, the common trait theme serves as part of dyslexia definition, which explains to the audience of what dyslexia is. The scenes which highlight positive dyslexia qualities were also framed to trigger the audience's awareness of the dyslexics' capabilities which at the same time they play essential roles in encouraging the audience to identify their students' learning difficulties. After explaining what dyslexia is all about, V1 shifted the audience's focus on how to identify dyslexia before briefly summing up what teachers could do to support students with dyslexia. The overall analysis shows that V1 was framed in sequential order as 69.3 percent based on dyslexia awareness content, followed by 16.9 percent on dyslexia identification and 14.96 percent on dyslexia intervention. Figure 6.1 below illustrates the framing of V1 messages.

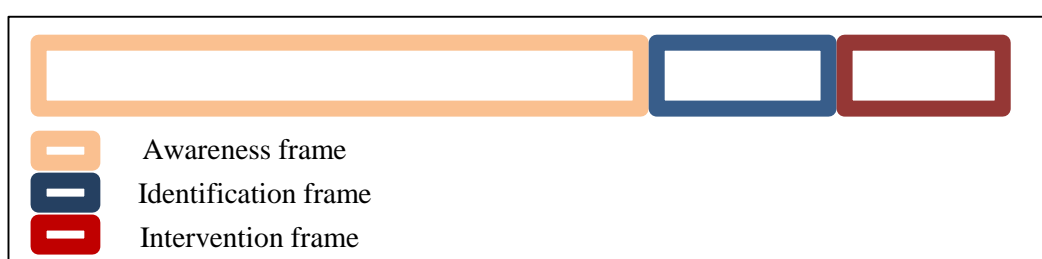


Figure 6-1 Framing of V1 Messages

V1 utilises the teaching and learning situation, highlighting the teacher-student relationship to shed the audience's sense of responsibility as a teacher. The main issue emphasised by V1 is the issue of dyslexics' marginalisation due to the ignorant teacher. Such negative valence can provoke the teachers to learn about dyslexia in order to avoid being ignorant teachers. Although V1 is presented in still images form, the tricks of camera angles (zooming and spinning) allow the audience to feel particular movement, which is necessary. The use of voice-over with proper intonation also suffices the audience to experience what it is like being dyslexic. The use of thought-tracking facilitates the audience to understand what is going on in the mind of a dyslexic. Instead of interpreting the visualised motion information, the audience needed to visualise the textual information interpreted by V1 creator. One of the advantages of using still image is that the creator could underline important points like definition and list the dyslexia characteristics using add on textual notes as in the post-it notes.

Table 6-1 Strengths of V1 Narrative Devices

Strengths of V1 Narrative Devices	
Literary Devices	Multimedia Devices
Situation: Teaching and learning Attribute: ignorant teacher; marginalised dyslexic Choices: Negative valence (risks) Actions: to learn dyslexia identification Issues: Marginalised dyslexics; Justice for dyslexics; Labelling dyslexics as stupid and lazy Responsibility: Learn dyslexia identification skills	Visual: Still image; textual notes (post-in note); build-in subtitles; thought- tracking; video animation (zooming and spinning). Audio: voice over; background music; sound effects

V2 displays the common traits of dyslexia in 1 minute and 38 seconds, the definition in 56 seconds; dyslexia identification in 1 minute and 50 seconds; and dyslexia intervention in 1 minute and 54 seconds. The positive highlights of dyslexia were framed throughout V2 in 2 minutes and 42 seconds via the auspicious images of the interviewees. The frames consist of 40.74 percent of dyslexia awareness content. However, by highlighting the professions of the dyslexics interviewed throughout the interviews including 8 seconds of featuring Steven Spielberg, the successful filmmaker who talked about dyslexia identification, 42.9 percent of V2 were made up to raise the audience's awareness on dyslexic's ability to succeed. However, the whole scene in V2 was dedicated to raising the audience's awareness of dyslexic's ability to succeed if the dyslexics were given the right support or the right intervention. The support that V2 has implicitly portrayed is available at schools like Westmark. Westmark is a private school which offers the students small-sized classes so that the teachers could give more attention to each student and address every individual student's needs. This idea of promoting Westmark as a better school compared to public schools was supported by a negative statement made towards public schools. In the interview scene with one of the teachers [start 04:34] [end 05:03], he said,

“One of the things is that is unfortunate with children in public schools is that because you have one teacher trying to organise a classroom with 35 students. You might even realise that that student is probably dyslexic, that students might also dyslexic but you simply in the course of your day are not able to give them the accommodations that they need and I think there's no more heart breaking than that”.

Within the intervention content-based frame, 29.1 percent are from dyslexia identification content. Figure 6-2 below illustrates the framing of V2 messages.

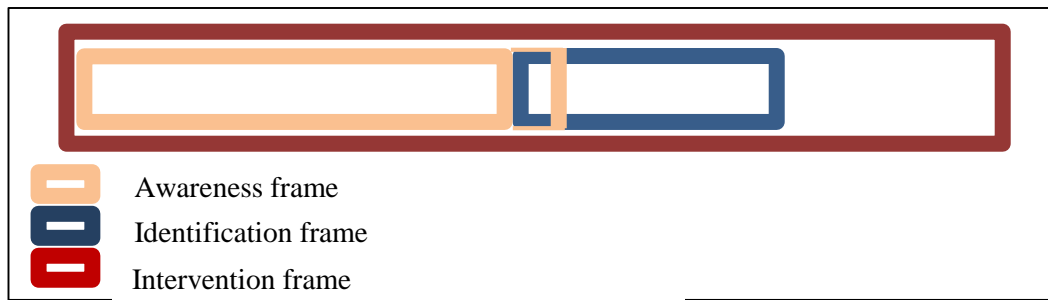


Figure 6-2 Framing of V2 Messages

Situation framing is less utilised as a narrative device in V2. However, the message on the importance of good teaching and learning situation is delivered subtly through the portrayal of successful dyslexics as good teaching and learning outcome. V2's most potent literary device is the attribute. Not only that the character of the successful dyslexics is real people, but they are also alive and exist at the moment of the interviews, unlike the other common examples presented in V1 and V3. Since V2 mostly narrates the success potential of dyslexics and the importance of excellent teaching support, it could be interpreted that V2's messages were framed to encourage the audience to take the right action for intervention.

In comparison to still images utilised in V1, V2's movie images enable messages on dyslexics' visual problems such as spinning words to be conveyed accurately. Rather than interpreting the textual description of 'spinning word,' the audience could see how the words spin. The use of a textual description of the interviewees' careers and positions is also helpful to convince the audience of dyslexics' potential. Table 6-2 below indicates the strengths of V2's narrative devices.

Table 6-2 Strengths of V2 Narrative Devices

Strengths of V2 Narrative Devices	
Literary Devices	Multimedia Devices
Situation: Teaching and learning Attribute: Informed teacher; successful dyslexic Choices: Positive valence (gain) Actions: to learn dyslexia intervention Issues: Positive highlights of dyslexics; the right intervention Responsibility: Learn dyslexia intervention skills	Visual: Movie images; motion related information; textual information. Audio: voice over; background music

In total, V3 was framed with 53.13 percent awareness content; 16.26 percent of dyslexia identification content and 30.56 percent of dyslexia intervention content. The awareness frame is contributed by 66 minutes and 29 seconds of dyslexia common traits presentation which mostly functions as part of dyslexia definition, and 2 minutes and 33 seconds of the spectrum of SpLD in

the form of a montage. The identification frame is made up by 21 minutes 7 seconds of dyslexia identification explanation while 39 minutes and 41 seconds of the multisensory teaching scenes shape the intervention frames. Unlike V1 and V2, V3 was divided into two settings. The main frame of the first setting is the awareness frame, which brought the audience to delve into a dyslexic's world via Ishaan's perspective. The second setting, on the other hand, was shaped by the mixture of the three mainframes. It begins with the awareness frame [20 minutes and 5 seconds]; then followed by the identification frame [21 minutes and 07 seconds] which includes a list of common traits that aim at raising awareness as well as identification tool; and the intervention frame [40 minutes and 06 seconds]. The second set brought the audience into a third person's perspective, mainly focusing on a teacher's responsibility as well as parents' responsibility. Figure 6-3 below illustrates the framing of V3 messages.

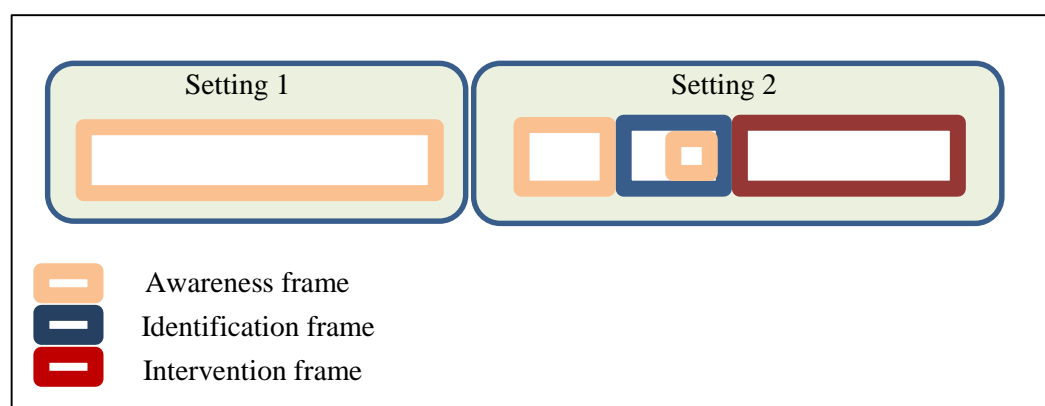


Figure 6-3 Framing of V3 Messages

Similar to V1, V3 utilises teaching and learning situation to relate the audience with the narration. However, V3's version of the teaching and learning situation is trifold. There are two kinds of teacher-student relationships in this movie. The relation has been extended to parents who play an important role in a dyslexic's life too. V1 focuses only on the ignorant teacher, but V3 presents a fairer image to teachers by introducing the caring teacher character. V3 also posits both positive [gain] and negative [loss] valences which not only encourage teachers to learn about dyslexia identification [so that they would not marginalise their students- at- risk] but also to learn dyslexia intervention [so that they could support their students' learning]. On top of playing the issue of labelling, V3 also features Asian most common education predicament, which is the exam-oriented culture. Countries in which education orientation is based on performance and achievements have always measured students' ability via formative examination scores. Hence, dyslexics' real potentials would hardly be recognised. V3 employs movie images; thus, the information is motion-related and mostly supported with audio devices such as the speeches, sound effects, and background music. As V3's duration is 2 hours 34 minutes 35 seconds, most of the vital information was able to be conveyed. Since dilemma portrayed in V3 ended with the great teacher character and his intervention, V3 encourages the audience to learn about

intervention skills more than identification skills. Nonetheless, it is sad to find that the most pivotal scene about intervention was only displayed as a montage without any supporting explanation in textual nor spoken form. The overall strength of V3 narrative devices is shown in Table 6-3.

Table 6-3 Strengths of V3 Narrative Devices

Strengths of V3 Narrative Devices	
Literary Devices	Multimedia Devices
Situation: Teaching and learning Attribute: ignorant teacher; marginalised dyslexic Choices: Negative valence [risks] Actions: to learn dyslexia identification Issues: Marginalised dyslexics; Justice for dyslexics; Labelling dyslexics as stupid and lazy; highly exam-oriented culture. Responsibility: Learn dyslexia identification and intervention skills	Visual: Movie image; motion related information. Audio: voice over; background music; sound effects

Chapter 7: Discussion

This study aims at understanding how dyslexia awareness messages are framed to trigger Malaysian primary school teachers to learn about dyslexia via online teacher professional development [oTPD]. Findings of the study showed that before the viewing activity, the participants were sceptical of their abilities and accountabilities to support dyslexic students [refer to 4.1.1]. However, the participants' reflections on dyslexia support resolution [refer to 5.4.4] revealed that their judgement to support dyslexic students have changed. After the artefacts viewing, all participants showed more confidence to carry out the procedure of identifying dyslexic students; however, still, lack confidence in providing the learning intervention. The participants' changes in their confidence and judgment to support dyslexic students indicated that there were messages that trigger them to explore more knowledge on dyslexia; convinced them that early identification is crucial, and finally made them decided to carry out early identification.

This chapter provides the platform for discussion on the significant findings of the study. Prior to the discussion, it is worth to recap the primary objectives of the study: to identify the triggering messages and to understand how the messages were framed to produce the triggering effects. Previously, in chapter 5, four triggering messages were discovered; in chapter 6, the frames and framing of each artefact were outlined. Thus, in this chapter, how the messages were framed is discussed to shed a better understanding of how they contribute to the triggering effects. It was also proven that the triggering effects have implications to the participants. Hence, the discussion is divided into two parts:

- i. The triggering messages.
- ii. The implications of the triggering messages to the participants.

7.1 The Triggering Messages

In order to understand why the participants are triggered with the identified messages, the researcher compares and relates the participants' views on dyslexia conception before and after the artefact viewing activity; and explains how these triggering messages are framed through their content and narrative devices.

7.1.1 The Effects of Being an Ignorant Teacher

It is recognised that the term 'ignorant teacher' would not be used in the UK professional literature. However, it is a term coming from the translation of Malaysian teachers' voices when describing understanding, attitudes and experience in relation to special and specific educational needs of pupils. Eleven participants mentioned about the ignorant teacher-characters featured in V1 and V3. In V1, 9 out of 11 participants reacted emotionally towards the ignorant teacher-character, Mr. Teasewell, featured in V1 while 2 of 11 participants referred to teachers in V3. The participants expressed their feelings as 'guilty,' 'sad,' 'frustrated,' 'angry,' and 'dumbfounded.' Although the participants felt negatively towards these ignorant teachers, especially Mr. Teasewell in V1, the participants' reflections prove that the ignorant teachers are the participants' mirror image. The participants were 'sad,' 'frustrated,' and 'angry' with themselves for being ignorant about dyslexia. The participants began to realise that their ignorance may have caused their students to suffer like Tom and Ishaan, the dyslexic student-character in V1 and V3 as R8 said, *"I feel like how little is my exposure to and knowledge about dyslexia. Dumbfounded and sympathised. Yes, because it's like dyslexics are really struggling, and people didn't realize their struggle."* Besides blaming their selves as ignorant teachers, there is also evidence showing that the participants blaming the education system. For instance, R 10 said, *"😡angry, 😞bored, and 😞sad because the Malaysian education system is still 'exam oriented'... In the end, teachers can't nurture and facilitate students but teach them to pass examination... So teachers don't get the opportunities to 'know' their students".*

The participants' emotional reactions towards ignorant teacher-characters are the most reflected triggering events in this study. Dirkx (2001) argued that adults' meaningful learning is shaped by its central role of emotions that is "imaginative and extra-rational" (p.64). A person will transform when the person is engaged cognitively and emotionally (Brookfield 2012), and later enhance the understanding (Albarracín and Kumkale, 2003; Picard et al., 2004; Chick et al., 2009). Bandura (2001) affirmed that people would be more easily influenced by the events that they remember since such events involve 'the process of reconstruction rather than simply retrieval of registered events' (p. 272). Thus, the researcher is of the opinion that such emotional-driven message enhances the participants' judgement about the mandate (Wood 2000; Albarracín and Kumkale 2003; Chia 2013) which demands the attention of students' and causes them to explore and learn more about the signs of dyslexia (Chick et al., 2009).

The participants in this study were adult students whose learning is facilitated by various resources. Adult lifelong learning takes place not only at the individual level but also involves social and political aspects (Brookfield 2012). The learning process relies heavily on how adults

learn to rearrange the information and engage with the message. Since most message framing studies measure the framing effectiveness by looking at the receiver's engagement with the message, the researcher considers that the cue to the participants' engagement is the message that could trigger the participants and motivate them to explore the highlighted message.

From the analysis of the findings, it can be seen that the participants realised the adverse consequences of being an ignorant teacher to their students. Hence, the participants claimed that every teacher should be able to identify their students' learning difficulties, which can only be done if they know the characteristics of dyslexia. One of the significant evidence is the R10's quest for dyslexia checklist. The empirical evidence of the participants' emotional reactions and the quest for dyslexia identification knowledge indicate that the participants were engaged with the message about the ignorant teachers.

In order to understand how the message about the ignorant teachers influences the participants' engagement, the researcher linked it with the framing strategies. According to Hallahan (1999), "framing strategies operate simultaneously at multiple levels" (p. 229). The framing analysis indicates that the message about the ignorant teachers is built around six framing strategies: the classroom situation [1]; which involves a teacher and a dyslexic student relationship [2]; which accentuates the issues of student's justice [3]; that provoke the audience's responsibility [4]; to take action to learn about dyslexia [5]; in order to avoid similar risk [6].

The classroom situation is a compelling narrative device employed in V1 and V3 because it increases the level of involvement of participants with the ignorant teacher-character as the focal attribute. According to Abrams and Meyers (2012), there is a correlation between recipients' change of attitude and level of involvement, such as personal relevance, the status of knowledge, and competence regarding the message. It is essential to note that the participants of the study were teachers who can mostly relate their experiences as a teacher in familiar classroom settings similar to V1 and V3.

At the beginning of the study, the participants perceived dyslexia as a writing problem indicated by reversal letter writing; which can be remediated; and not a severe problem. The participants did not realise that dyslexia is a reading problem which would result in students having some behavioural issues. Most importantly, the participants did not realise that dyslexia is incurable; hence, dyslexic students need support with their learning. However, after the artefact viewing activity, the participants realised that dyslexia is a serious hidden problem. The teachers would not be able to offer the right supports unless they have the knowledge to identify dyslexia among their students. This finding supported Howard-Jones's (2014) and Zadina's (2015) claims that teachers' understanding about dyslexia has been influenced by neuro-myths. By framing the

dyslexia awareness messages within neurodiversity framework that emphasise the nature of dyslexia difficulties, the participants started to realise the real struggle of people with dyslexia (Jordan et. al 2009; Zadina 2015). It was also evidence that R8, before the artefacts viewing activity, confidently claimed that the teachers were able to identify the students' learning problem. Hence, the literacy and numeracy screening (LINUS) were useless. Nonetheless, after the artefact viewing activity, R8 realised that to identify students with dyslexia requires the teachers to master different sets of knowledge from identifying students with lack of learning mastery. R8 suggested that schools should make a banner to raise teachers' awareness of dyslexia identification – although she insisted that the teachers with special need education should be assigned to conduct the screening.

The situation of the ignorant teachers and a dyslexic student allows the participants of the study to look better into the situation and consequently relate the situation with their personal experience - personal experiences as a teacher and experiences with students such as Tom and Ishaan. This message makes the participants' learning about dyslexia more meaningful as they can use their experiences to guide them in decision-making (Mezirow 1990).

Although this message is conveyed in both V1 and V3, it is discovered that 4 out of 9 participants referring the message to V1 recalled the name of the teacher-character, Mr. Teasewell. One possible explanation is that Mr. Teasewell appears throughout the video and plays the leading role as important as the role of the dyslexic student, Tom. This is a strong indication that use to identifiable persons when framing the messages helps – making the context personally relevant. According to Baden (2010), a conflict frame requires the inclusion of at least two opposing claims or ideas. It can be said that V1 has fulfilled the requirement for creating the conflict frame. The choice of only two opposing claims has proven that not only that V1's framing strategy is sufficient, but also better. While viewing V1, the participants' attention is undivided because there are only one ignorant teacher and one dyslexic student. Unlike V1, V3 featured more than one ignorant teachers and one dyslexic student. Not only that the participants' attention is split between the ignorant teachers and the knowledgeable teacher; but also between the ignorant teachers and the ignorant parents.

Besides associating themselves as ignorant teachers in V3, the participants associated themselves with knowledgeable teachers too. The analysis of the participants' reflection indicates that participants' attention was dedicated more to one knowledgeable teacher compared to six ignorant teachers in V3. Among the six ignorant teachers, only three characters were named – George, Sen and Tiwari - indicating that the ignorant teacher-characters in V3 are not significant. This shows that the better teacher attribute is more influential than the ignorant teachers

attribute in V3. Another reason that makes the ignorant teachers in V3 less influential, if compared to Mr. Teasewell in V1, is that there are two antagonist characters who play the role of ignorant 'significant others'. In a psychological view, a significant others are people who play important roles in a person's life such as parents and teachers. In V3, when the ignorant significant other's character is shared between the teachers and the parents, the blame is shared. Hence, the participants [who are the teachers] feel less guilty as the parents are also guilty of being ignorant.

One common feature that makes both characters, Mr. Teasewell and Mr. Nikumbh, the focal teacher attributes in V1, and V3 respectively, is that the character's appearance in the movie is consistent. The consistency of the teachers' appearance in the dedicated scenes allows the participants to address their roles because, in movies, the audience's multiple object tracking is accomplished using a scene-based frame of reference (Liu et al. 2005). With regard to ignorant versus knowledgeable teacher characters as focal attributes, the findings show that the participants were triggered by the ignorant teacher character more than the knowledgeable teacher character. It is understood that the participants realised the risk of being an ignorant teacher to the students. Therefore, the participants took the necessary actions to overcome the problems.

On the other hand, the message that persuades the participants to become a knowledgeable teacher is framed as a positive valence associated with gain perception. Compared to the gain perception, the risk perception is more alarming. An extensive body of research on the correlation between the effectiveness of message framing and the perceptions of audience indicates that the audience tends to be affected by negative valence frame when it is associated with risk perception (Rothman and Salovey 1997; Edwards et al. 2001; Lee et al. 2008; Kim and Kim 2014).

7.1.2 The Successful Dyslexic Professionals

Seven participants realised that dyslexics have the potential to succeed and become professionals. Not only that the participants realised of the dyslexics' potentials to succeed in their careers but most importantly, their potentials to succeed in professions that require good academic qualifications such as medical practitioners and lawyers. For instance, R13, who was a remedial class teacher, seemed to be surprised to know that dyslexics could turn out to be academically successful. R13's repeatedly said, *"I don't believe that there are successful dyslexics. Definitely can't believe it...that is not a success but a gift"*. R13 used the word 'gift' to indicate that dyslexic-turning-into-successful-professional is an unusual circumstance because according to R13, *"students with learning difficulties normally cannot follow the teaching and learning like*

other children... they are slow and continuously left behind. That is a reality". Given R13's position and experience as a remedial teacher, it can be said that R13 is confident of claiming that students with learning difficulties could not learn like other students. R13 highlighted his students' incapability to compete with 'normal students' in the classroom. This is due to the limited number of professionals with specialized training to identify those with specific learning disabilities and also lack of standardized measurements in catering the problems related to specific learning disabilities in Malaysia (Dzalani and Shamsuddin 2014). Hence, witnessing successful professional dyslexics in V2 is an unexpected encounter. Perhaps, the message that is framed as 'successful professional dyslexics' enables the issue of dyslexia to be analysed as dilemma (Norwich 2007) in a positive way.

It is possible to interpret that the participants' stigma of people with less ability remains although they insisted on addressing disabled people as people with different abilities. The term OKU, an acronym for *Orang Kurang Upaya* which means people with less ability- has been changed to *Orang Kelainan Upaya* which means people with different abilities in the year of 2009 by the then Minister of Sports and Youth (Utusan 2009). For example, before the artefact viewing activity, R4 and R14 insisted that dyslexic students be sent to special school with special need facilities. R14 claimed that dyslexic students *"were better off there because the teachers are well trained with special needs."* This is because according to R4, *"not all teachers can handle students like this."* Besides, as R14 claimed, *"they got a disability allowance too."*, Malaysia acknowledges disabled people, including people with learning disabilities, to contribute to the country's development within their limit of capabilities. This calls for vocational training as an alternative channel of education for students with a less academic ability (Taib 2008). According to Pei (2015), although the newly published 2013 Special Education Regulations has reworded the judgment of student placement based on suitability (Lee and Low, 2014), the contentious puzzle of educability remains.

The findings of the study show that after the artefact viewing activity, the majority of the participants realised the real potential of dyslexic students. However, R1 and R2 remained to believe that vocational school is a better school for dyslexics for learning preferences reasons. For instance, R1 wrote, *"To me, vocational school may be good for dyslexics... they do well with hands-on skills."* R2 added that *"Sometimes on academic too but only one subject that they like. Like science, because there are lots of experiment. Or Maths."* Moreover, R2 said, *"We need vocational school for students like this. They will feel more appreciated."* This is because, a survey done among the students has shown that the 'underachievers and less-academically inclined students have voiced out their interest in learning vocational subjects' which is less theoretical and

assessed based on competency, unlike 'mainstream school's traditional paper-and-pencil tests' (MoE 2004, p. 12).

It is important to note that the interviews with the successful professionals in V2 were carried out as part of Westmark School's promotion. When promoting Westmark School as a better school for dyslexics, the audience was not briefed on the privileges of attending the school for dyslexics except for the small class size. The researcher anticipated that together with other information delivered in V3 which emphasise on the dyslexic character's ability in art, perhaps, R1 and R2 decided that Malaysian mainstream schools are still unable to accommodate the dyslexic students' needs. Lessons in vocational schools are more hands-on, and the testing emphasises on the practical component, which is multisensory in the approach. Unlike vocational schools, the Malaysian mainstream schools' teaching approach relies heavily on the reading text as the teaching approach and writing text as the testing measurement.

The total duration of V2 is 6 minutes and 30 seconds. The audience who watched V2 spent the first 2 minutes and 44 seconds to watch a series of interviews with successful dyslexics. One of the important devices utilised to challenge the participants' views on dyslexic's ability in academic skills is the use of textual information of the interviewees' title and professions. Throughout the interview sessions, the audience could only see the name, the title, and the position of the interviewees. Besides, the name, the title and the position of the interviewees are presented in a synchronised pattern enabling the message tracking to be accomplished using a scene-based frame of reference (Liu et al. 2005) that is similar. The participants had been hypnotised subtly. A mostly repetitive and stable system of messages can cultivate new belief (Cohen and Weimann 2000). Following the repetitive frames that feature the successful dyslexics with their names, the titles and the positions is the affirmative scene featuring Sally Shaywitz, a prominent researcher and the co-director, Yale Center for Dyslexia and Creativity in the field, who mentioned, *"in fact if you look at the top tier of any profession writers; people in cinema; physicians; Nobel laureates; attorneys; people in Business and Finance, there's a disproportionately high number of people who are dyslexic."* Listening to an affirmation from the expert who utter the key phrases such as *"top tier of any profession"* and *"there's a disproportionately high number of people who are dyslexic"* could boost the audience's confidence in believing that dyslexic students are not slow students; that they have a great potential to be successful professionals. The participants may not know who Sally Shaywitz is. However, the participants would notice that Sally Shaywitz is the co-director, Yale Center for Dyslexia and Creativity because Shaywitz's position was written on the screen throughout the interview with her.

Another cue for the receiver's level of engagement with the delivered message is the source of credibility (Shen et al. 2015). Having an expert such as Shaywitz to talk about dyslexia would increase the audience confidence with any claims made about dyslexics. Moreover, the successful dyslexics professional featured in V2 are real people interviewed as living objects, unlike other examples of successful dyslexic mentioned in V1 and V3. Examples such as Einstein and Leonardo da Vinci are samples of history which no longer alive to tell their stories in person. According to R13,

'There is one time, when I attended a course, one of the speakers said Tom Cruise is dyslexic. We would like to believe but find it hard at the same time. Because Tom Cruise is not our schoolmate 😊.'

The most popular comments given by the participants [6 of 15 participants] regarding the source of credibility is that the characters in V2 and V3 are real people. Featuring real people talking about their experience as dyslexics are one of a great technique to convince the audience. The excerpts below are the evidence.

R13: *'The dyslexics themselves admitted that they experience such situations. If we give an example without any evidence, it would be difficult to believe'.*

R1: *'In V2 they interview real people compared to graphic... haha. The cartoon's presentation is actually on point, but if you ask about preferences, I would say V2.'*

The close-up shooting angle is another technique applied to bring the audience closer to the interviewees and make the audience feels their interviewees' presence. A close-up shot gives the interviewees more frame space for them to speak into, giving the audience the sense that the interviewees were talking to them (Heiderich 2018).

7.1.3 The Multisensory Teaching Approach

The third triggering message is the multisensory teaching approach presented in V3 [start 2:03:01] [end 2:05:04]. Before the artefacts viewing, all participants showed a lack of confidence in teaching dyslexic students in mainstream classes. However, the multisensory scene aroused the participants' interest to learn about the multisensory approach. The participants were given some tips of what Mr. Teasewell promise to-do and not-to-do in his teaching in V1. In V2, the participants were presented with ways to teach and accommodate the needs of dyslexic students. In V3, the participants got a glimpse of what the unique teaching method is.

R12: Like the in-class scene...the one that he wrote is one of the prominent scenes because there are the characteristics <https://youtu.be/BBj7VtB-k-s> this is what the teacher did after he knew.

R14: Many approaches utilised so that his student become normal in the eyes of society.

This particular scene is remembered clearly by the participants, especially R13 - *"Till now, I can still remember how the teacher help the kid. When we have the right method and approach to help these people... X impossible, they can be more successful than us."*

According to Tykocinski et al. (1994), messages that are framed to match people's current experiences and concerns can elicit distress by identifying seemingly important goals that have not been adopted. This particular message manages to trigger the participants who are almost confident to teach dyslexic students in mainstream schools. From the findings we learned that R12 has successfully experimented an instruction procedure which she discovered to benefit all students in her class; R13 is a remedial teacher who is trained to teach students with learning difficulties, and R14's wife works in a special need school. R12, R13 and R14 lack of confidence to teach dyslexic students is due to lack of knowledge about the right method – not because of a belief issue. Nonetheless, we have also learned that these participants view the possibilities of teaching dyslexic students if they were trained with the *'right method and approach to help'* (R13). R12, R13, and R14 saw the opportunities after viewing the multisensory-teaching-approach scene. Sadly, the participants' excitement about the multisensory teaching approach was not supported: the multisensory teaching approach was previewed as a montage; further explanation about the teaching approach was not presented. The missing explanation caused a split-attention effect. In explaining the split-attention effect, Sweller (1999) claimed that students or audience found unintelligible information will search for resources as a reference in order to understand the given statement. The missing reference will increase working memory load as the mind needs to dig out information (the multisensory teaching approach montage in V3) in the memory files and integrate it with the statements. An integrated format of explanation to a multisensory teaching approach will reduce split attention and benefit the less experience audience (Kalyuga et al. 1998).

7.1.4 The Dyslexic's Unique Way of Thinking

The fourth triggering message is the message on the dyslexic's unique way of thinking [start 37:35] [end 40:19]. Although this message is mentioned across all three artefacts, only V3 provides the visual scenes. R12 reflected this scene when she said that *"His mind is beyond our imagination...like some of us can imagine things as we learn through visuals etc.... but the way he interpreted each number or symbol was way cooler than us haha..."* In this scene, Ishaan, the dyslexic student character, was given a math test. When Ishaan was trying to solve a simple math equation [$3 \times 9 = ?$], he pictured the numbers as representing planets – planet number 3 and planet number 9. In his mind, which was illustrated in animation, the planet number 3 crashed planet

number 9 hence make the planet number 3 the winner. Therefore, $3 \times 9 = 3$ because the planet number 3 is the winner.

Two different interpretations can be made from this particular scene. First, portraying a dyslexic student solving math equation using visual mental process helps the audience to visualise dyslexic's visual thinking preference. Neurodiversity paradigm suggests that some human's brain is differently wired and is celebrated as an asset (Armstrong 2012). One of the celebrating facts is that dyslexics' mental processing is three-dimensional [3D] which make them visual thinkers who see the 'big picture' (Ehardt 2009) and logically gifted (Shaywitz 2005). Due to their preferences for visual representations processing (West 2009 in Cancer et al. 2016), most dyslexics have a peculiar tendency to creative thinking especially in a situation that requires alternative decision making (Cancer et al. 2016). Eighty-four percent of dyslexics are above average at 'creating an original piece of work or giving ideas a new spin' (Madebydyslexia 2017).

Nevertheless, the answer to question 3×9 is not 3. Thus, the scene could give the audience the impression that dyslexics are stupid and nonsense. Fortunately, in this study, the participant who is triggered by the scene claimed that she is impressed with dyslexic's visual thinking and did not think about the wrong answer given by the character in the scene. Further on discussing the scene, R12 and R2 decided to learn more about her students' thinking. Another drawback is that, similar to the multisensory montage; there is no explanation about visual thinking accompanying the thinking scene. Although dyslexic is tested to be more creative than non-dyslexic, Kapoula et al. (2016) discovered that education influences creativity in both dyslexic and non-dyslexic teenagers. In other words, creative thinking can be nurtured. Therefore, overgeneralizing creativity as dyslexic's forte, such as the scene in V3 [start 37:35] [end 40:19] could be deceptive. Therefore, in the researcher's opinion, an integrated format of explanation should be made to inform the scene that depicts the unique dyslexic ways of thinking- should such scene to be employed in dyslexia awareness campaign or training for non-experts.

7.2 Implications for the Participants of the Study

The chances for central learning processing to occur is higher when the audience is triggered (Petty et al. 1981). To check whether the participants' level of involvement has increased, the researcher looks into the participants' intention to act for dyslexia supports as the cue. These include the participants' intentions to learn about; or intention to act for dyslexia identification and intervention. In the discussion that follows, the researcher addresses the implications of the triggering messages for dyslexia identification and intervention.

7.2.1 Learning about Dyslexia Identification

Overall, the participants are fuelled up to learn about identification, but not yet about intervention. Fifteen of 15 participants agree that all teachers should learn about dyslexia identification. The findings also revealed that the participants explore the common characteristics of students with dyslexia, such as the observation checklist. It could be anticipated that the participants of the study are more convinced to provide support for students with learning difficulties by helping to identify students-at-risk compared to provide intervention due to reasons that the researcher categorised in three parts:

1. Before the message framing study, the researcher discovered that the participants' current level of dyslexia awareness is low. The participants exhibit lacks of dyslexia conception and have some misconceptions. Vygotsky's Scaffolding theory suggested that the learning objective should be built within the students' zone of proximal development. Thus, the artefacts are selected because they contain messages that raised the participants' awareness of dyslexia or specific learning difficulties within the neurodiversity framework. Input hypothesis elaborated that the input that complies with the students' zone of proximal development as knowledge, which is one level higher $[+1]$ than the student's current background knowledge (Krashen 1992). Knowing the conception of dyslexia is knowing the problem faced by dyslexics. Logically, once the participants understand what the problem is about, the next thing to learn is about how to identify the problem. Only after the problem is identified, would people find the solution or intervention. Therefore, the +1 input for the participants who have just understood dyslexia conception will be the knowledge of dyslexia identification. According to Reid (2016), the knowledge of the student is the extreme importance as with that knowledge, and the teachers would be informed of the students' learning needs and style so that teachers could consider the intervention strategies.

2. In all three artefacts, the explanation of dyslexia conception mainly focuses on the description of problems. Hence, to understand dyslexia better, the participants seek to explore more characteristics of dyslexia. Therefore, the participants are keen to learn about dyslexia identification. According to Hallahan (1999), "framing operates by providing contextual cues that guide decision making and inferences by the audiences" (p.208). Analysis of the content indicates that for all three artefacts, the dyslexia identification frame is set to tail the awareness frame. Of all three artefacts' content framing, V1's content framing is more organised: 69.3 percent of dyslexia awareness content, followed by 16.9 percent of dyslexia identification and 14.96 percent of dyslexia intervention [refer to 6.3]. Hence, it makes V1 messages easily understood.

R15: More organised...step by step. [R15 refers to V1]

R9: In the term to learn about dyslexia, video 1and2, you shared more clear and suitable to understand about this... I learn about the concept.

Not only that the more organised frames [in V1] ease the participants' understanding, it also reduces the participants' cognitive load. In multimedia communication, information tends to rely on visual images more than on text (Kress and Van Leeuwen 2001). However, by listing out essential facts about dyslexia symptoms like the 'post-it-notes' within the scenes [in V1], the participants' attention is gathered because the 'post-it-notes' act as an integrated format of explanation [about the visual image] which benefit the less experience audience (Kalyuga et. al, 1998 in Kalyuga 2009) such as the participants of this study. According to Geise and Baden (2015) frames that utilise 'different kind of devices capable of signifying interpretable information.' Thus, as the implications from their understanding, the participants in this study interpreted that they need to begin the support for dyslexic students by identifying the students' problem. Hence, all participants were keen to learn about dyslexia identification.

3. Via the ignorant teacher character, the participants received a powerful emotional message. Emotion is the first channel of human's awareness that plays a vital role in promoting thinking (Dirkx 2001; Albarracín and Kumkale 2003; Picard et al. 2004; and Chick et al. 2009). According to Petty and Cacioppo (1986), receiver's attention depends on his or her motivation or ability to engage with the message. Persuasive messages are more likely to increase the receiver's level of involvement if the messages are personalised to the targeted audiences' (Morgan and Cannon 2003) especially when it highlights affective reactions (Albarracín and Kumkale 2003; Chia 2013). Thus, the messages about ignorant teacher and successful dyslexic receive more reactions because they are messages that personalised to the targeted audience.

Emotions triggered by negative valence is more effective than positive valence. Message on positive valence received strong reactions only from the audience who found the benefit of committing to the promoted message; or those whose interest is aligned to the promoted messages. However, studies on negative and positive valence in message framing revealed that people tend to react on negative valence because people want to avoid problems or danger (Rothman and Salovey 1997; Edwards et al. 2001; Lee et al. 2008; Kim and Kim 2014). The ignorant teacher message encouraged the participants to react so that the participants' students would not be misunderstood and neglected. The participants understood that it is the teacher's huge responsibility to identify the problems. However, the teachers may have an option to send the students to learn from other teachers who are trained with specialised skills. The message of successful dyslexic professional is an additive that boosts the participants' motivation to identify

dyslexia. By helping to identify the students' problems, the participants could help the students to find the right support and became a successful person in the future.

7.2.2 Learning about Dyslexia Intervention

The participants, in general, may not have explicitly shown their confidence in discovering the knowledge about dyslexia intervention. However, 6 of 15 participants listed strategies to be implemented in their classroom, which suggested that the participants knew that they are capable of teaching dyslexic students. The suggestions were to ensure the students receive assistance while doing enhancement exercises; avoid making the students to copying down notes; make simple instructions; recording lessons on video; provide extra classes; do shared readings, and teach penmanship. Also, 3 participants have thought about incorporating metacognitive aspects in their teaching: R2 requires her students to reflect on lessons learned while R12 would love to listen more about her students' ideas about specific issues or questions.

The participants managed to arrive at the teaching strategy decisions after learning from the artefacts about the characteristics or the problems faced by dyslexic students. The participants, then, integrate their current knowledge about teaching and learning in the Malaysian mainstream classroom with the new information related to the dyslexia characteristics. The multisensory teaching approach montage, perhaps, is the best triggering message for dyslexia intervention available in this study. Nonetheless, the participants' curiosity about the teaching approach featured in V3's multisensory teaching scene was not backed-up with sufficient information. The multisensory teaching approach is unfinished business. Because the participants of the study are the non-experts' audience, integrated information is crucial to avoid the participants' split-attention effect (Kalyuga 2009).

The participants who were triggered by the V3's multisensory teaching scene have probably viewed it as a clue for a secret teaching approach which they may have the potential to learn and apply in their classroom. However, the participants who were not triggered may view the information as a suggestion that dyslexic students belong to a special school and only be taught by teachers with specialised skills. The researcher anticipated that because there is no further explanation of what multisensory teaching is about in any of the artefacts selected; and because V2's promotion of Westmark School as the kind of school dedicated to dyslexic students, other participants, may have put some reservation on whether or not they should or could contribute to teaching intervention.

Besides, the participants' background experience rationalised the participants that it takes many changes to provide dyslexia intervention. According to R9, *'Our education system is not like*

overseas. One teacher teaches almost all the subjects. Then the class size does not reach 40 students. So teachers could still give attention to those with over limit'. However, the participants agreed that they could still contribute by 'giving proper instructions to students,' 'provide handouts,' 'assist the students with in-class enhancement work,' 'extra classes,' 'recording students' in-class activity,' and 'encourage the students to talk about their learning.'

7.3 Summary of the Discussion

Weick et al. (2005) highlighted a vital process of sense-making. The sense-making process begins with questioning oneself of the meaning of the events [what is the story?] and end with the intention to act [what do I do now?]. The findings revealed that there were two stories delivered in all three artefacts. First, the participants realised that dyslexic students have potentials to succeed if they received the right support [the story]. Nonetheless, the right support could not be given if the teachers are oblivious of the characteristics of dyslexia [the story]. Therefore [what do the teachers do now?], the teachers should learn how to carry out dyslexia early identification. Second, the participants discovered that dyslexic has a problem with text decoding and phonology; dyslexic's brain works differently [the story]. Thus, the traditional way of teaching, which relies heavily on text-reading does not support dyslexic students' learning [the story]. Therefore [what do the teachers do now?], the teachers should apply different teaching approach such as the multisensory teaching approach.

Overall, the triggering messages led the majority of participants to learn about and carry out early dyslexia identification. This is because the framing of the messages elaborates the problems with dyslexia identification and the risks of failure in conducting early identification. Although the participants were triggered to learn about teaching intervention, unfortunately, there was less elaboration on the learning intervention. Of all the triggering messages, messages that portray the negative consequences of being an ignorant teacher has a massive impact on the participants. The finding is congruent with the study of message valence that focuses on the loss [negative] and gain [positive] frames. An extensive broad of the literature shows that generally, receiver tends to be affected by the loss frames when it is associated with risk perception (Rothman and Salovey 1997; Edwards et al. 2001, Mollen et al. 2017). However, the message that highlights the successful dyslexics played an active supporting role. It convinced the participants that failure in carrying out dyslexia early identification would not only jeopardise the students' opportunity to learn but also to miss the opportunity to identify great talents. In order to convey that message, the use of classroom; focusing on one student-one teacher relationship as the background is powerful. It made the messages framed in-line with the audience's background knowledge and the aimed aspirations.

Chapter 8: Conclusion

The analysis of the findings indicates that messages that are framed in line with the audience's background knowledge and the aimed aspirations could trigger the participants to learn about dyslexia conceptions and support. This chapter summarises the important aspects of message framing within the area of professional development and set in the context of dyslexia awareness raising in Malaysia. The summary of the study is presented to recap the issues raised. The significance of the findings is emphasised to illustrate how the study has succinctly answered the matters concerned. Finally, several recommendations are put forward for future research and the implications for potential educational training and policy are identified.

8.1 The Summary

The motivation behind the study is to seek the justice for dyslexic learners in Malaysia and, by way of extension, in other countries that have a similar background. Teachers' little understanding of dyslexia can impede the learners' process of learning. Without the proper understanding of the learners, not only that the provision to support learners with learning difficulties is uncertain, but it also increases the risk for marginalisation among learners with dyslexia, which in turn, could have a compromised effect on the implementation of an inclusive education system – a new system currently adopted by the government of Malaysia. Review of previous literature revealed that the lack of dyslexia awareness in Malaysia is due to a lack of professional development programmes provided to teachers in Malaysia on dyslexia and special educational needs. The success of an implementation of inclusive education for learners with special educational needs such as dyslexia owes to its success in replacing integrated education system (Norwich 2007; Reid 2019). The transformation of the educational system requires a transformational professional development that will assist a change in the educators' beliefs of the nature of disability (Jordan et. a. 2009). The establishment of the teachers' beliefs of the nature of disability will lead to the shift in teachers' assumption in reconstructing their approach to address the interplay that exist between the different ability values (Norwich 2007). It is believed that this shift of assumption between impairment perspective and difficulties perspective could be realised through the lens of neurodiversity (Graby 2015). This claim is supported by a scoping review on empirical evidences for dyslexia-friendly classroom and the whole school system that showed teachers who understood that dyslexia is an impairment that did not equate to lack of intelligence are better informed on how to address dyslexia in the classroom (Kelly 2019).

In order to escalate access to educational opportunities and to enable unlimited enrolment to train for dyslexia support, many of the training opportunities are now made available online.

Prior to the study, the researcher evaluated two popular dyslexia training courses known as MOOC 'Supporting children with difficulties in reading and writing' by University of London, UCL Institute of Education, Dyslexia International (<https://www.coursera.org/learn/dyslexia-difficulties>); and a UNESCO project, 'Basics for teachers: Dyslexia – How to identify it and What to do' (<https://www.dyslexia-international.org/ONL/EN/Course/Intro.htm>). Both courses received good feedbacks from teachers and dyslexia advocates and enrolment. Moreover, President Obama made it compulsory for the teachers in America to enrol in the MOOC. The evaluation of the two online modules for dyslexia training leads the researcher to conclude that the crucial part of online training is to trigger the teachers' participation. Hence, the content for the awareness training should be made tailored to the need of the participants, which scaffold the teachers' background knowledge with the pedagogical content for the training. Most importantly, because the nature of an online training participation is a voluntary basis, the researcher believes that the introductory messages to dyslexia awareness need to be framed in a way that could trigger the participants' learning intention to learn about dyslexia identification and intervention.

With the background as mentioned earlier, the researcher seeks to understand how dyslexia awareness messages are framed, as online resources, to trigger Malaysian mainstream primary school teachers to learn about dyslexia. In order to understand how effective messages about dyslexia is framed to trigger the participants' learning about dyslexia identification and intervention, the participants' reflections on the three selected artefacts were studied. Then, the content framing and the narrative device's framing were analysed. The links between the findings from the participants' reflections and the framing analysis were later deliberated to seek an in-depth understanding on how the framing of the messages triggered the participants' learning inquiry; and where the triggered messages lead the participants to an extended learning endeavour about dyslexia. An inductive-deductive method was utilised in this study. Before the study of message framing, a study to identify the participants' current knowledge was carried out [pre-message framing]. The pre-message framing study is a preliminary but significant study as it identifies the selection of the artefacts that work on scaffolding the participants' new knowledge about dyslexia.

The artefacts selected contain messages about dyslexia awareness within neurodiversity framework. The vital aspect of the neurodiversity framework that became the foundation for the artefact selection is the positive acme of dyslexics via messages on neuro-diverse learning

operation which acknowledge the impairment irrespective of intelligence; and the highlights of successful dyslexics.

8.2 Findings of the Study

The findings of the preliminary study revealed that the participants' lack of dyslexia awareness is due to a weak conceptual understanding of dyslexia. With a transformational professional development approach which puts emphasis on conception and belief establishment, the findings of the study demonstrate that learning materials which are framed with neurodiversity elements are able to improve the participants' understanding of dyslexia conception; trigger the participants to explore the new knowledge; integrate the new knowledge with previous knowledge, and make decision on the pedagogical implications for dyslexia support. Thus, provide an empirical evidence supporting the claim that neuroscience- based information about dyslexia facilitates education reform (Zadina 2015). Overall, the identified message framings on all three studied artefacts have shown to have prompted a shift in the beliefs of the participants on dyslexia identification. However, due to some weaknesses in the framing of dyslexia intervention messages, on the part of the participants' belief of dyslexia intervention, it is found that it is not yet fully impacted.

There are four message frames that are found to trigger the participants of the study to learn about dyslexia identification and intervention. They are the 'ignorant-teacher'; 'the successful-dyslexics'; 'the multisensory-teaching'; and 'the dyslexic's-unique-way-of-thinking'. Of all four triggering messages, the most triggering message in the study lies in the frame that portrays the effects of being an ignorant teacher. The message framing analysis revealed that in delivering the message, the message sender utilised meaningful situations that jolt the participants' emotional sense. A classroom situation with a marginalised dyslexic learner due to teachers' ignorance strongly mirrors the situation in the participants' real-life classroom. Hence, preparing a situation which allows the participants to immerse into their real experience is essential. It is important to note that the target participants for the dyslexia support online training are the teachers. By comparing the ignorant teacher character featured between V1 and V3, the researcher understands that by choosing only one teacher as the focal attribute, the participants' sole responsibility for the change could be accentuated; whereas by lumping more than one focal attributes has given the audiences' ideas that the problem is a systemic problem in society. Hence, making the audiences feel it as a shared responsibility which in turn, makes them feel less guilty. The combination of the biased situation and the focal attribute to the teacher as the sole responsible individual is a smart framing strategy because it provokes the audience's emotion. Adding it with the negative perception of an 'ignorant teacher' is the cherry on top of the topping

for this message. This is because the negative perception of an ignorant teacher arouses empathy in the participants, who are teachers, to intervene in order to prevent the undesirable consequences.

The 'interview-with-the-successful-dyslexics' message, although prompted quite several participants in the study, is not the primarily-driven triggering frame that leads the participants to further learn about dyslexia identification. However, it does play a supportive role that convinces the audiences to take action. The fear of being an ignorant teacher fires up the audiences' motivation to learn the pedagogical content of dyslexia support largely because they wanted to avoid the risk; but telling the audience that dyslexics are brilliant learners who are at risk of being marginalised without the teachers' help- seal the deal for the help-giving decision made, particularly the help with identification. The messages about 'multisensory teaching' and the 'dyslexic's unique way of thinking' could also be categorised as supporting messages that could push the audiences to further learn about dyslexia intervention – if more information is provided. Even though the 'effect-of-being-an-ignorant- teacher' message is proven to be the main triggering message in this study, the other three supporting triggering messages are shown to be important as well. More interestingly, the supportive triggering messages are messages that convey the neurodiversity perspective. Professional development programmes for dyslexia support that feature element of neurodiversity often emphasise the positive highlights of being dyslexics, as well as, the dyslexic's different learning traits.

Matthes (2009), who conducted a systematic analysis of media framing studies from 1990 to 2005, discovered that most studies are descriptive, not testing any hypotheses regarding framing theory. The current study, although does not aim at testing the framing theory hypotheses, provide the empirical evidence that supports the theoretical frameworks for message framing and neurodiversity. The empirical evidence is discussed as the following.

The framing analysis for the study on the triggering message framing for dyslexia awareness campaign utilises Hallahan's seven models of framing applicable to public relations. The findings revealed that six out of seven models of framing applied in all three samples of artefacts contribute to the participants' decision making to learn the pedagogical content for dyslexia support professional development. These six models are:

- I. Situations [classroom situation featuring a relationship between an ignorant teacher and dyslexic learner; between a knowledgeable teacher and dyslexic learner]
- II. Attributes [ignorant teacher; knowledgeable teacher; successful professional dyslexics]

- III. Choices [negative valence is more impactful than positive valence]
- IV. Actions [negative message influence the decision; positive messages support the decision made].
- V. Issues [the negative impact of being ignorant teachers; risk]
- VI. Responsibility [Sole responsibility; self-image; personal actions rather than systemic problems in society]

However, because the message aims to educate the audience, strengthening the risk by enforcing simple conflicting frame is recommended. Interrupting the risk-perception message with multiple frames may confuse the audience and burden them with cognitive loads.

All supportive triggering messages in the study feature the elements of neurodiversity framework:

- I. The positive highlights of being dyslexics [successful professional dyslexics]
- II. The dyslexic's different learning traits [multisensory teaching; dyslexic's unique ways of thinking].

It was also recognised that when the participants talked about their emotions, they skipped the clarification part [explore the new knowledge] and jumped into emerging their ideas in emotional ways; integrating the new information with their own experience; being regretful of the mistakes done; identifying the issues concerned, and actively thinking about the solution. It is evidenced that messages that connect the participants with their own experience arouses powerful emotional reactions, in which the participants did not hesitate to believe in neurodiversity or bother to clarify further the newly acquired information on dyslexia. However, in all fairness, though in a quite insignificant manner, the participants did explore information such as a list of dyslexia criteria to conduct early identification process, and not to seek for clarification to gain confidence with the new information.

Another significant finding from the study is the participants' contradicting belief of perceived-need and actual-need of useful learning materials. Findings of the study shows that more participants voted V2 as the best artefact [10 out of 15 participants] compared to V1 [8 out of 15 participants] and V3 [4 out of 15 participants]. Nonetheless, the analysis of the participants' reflections reveals that the participants learned more from V1 compared to V2 and V3. Despite the participants' comments on the V1 source of credibility due to its fictional character compared to real human character, V1's semantic scenes structure is more organised. The hierarchy of the frame composition is vivid, starting from messages on dyslexia conception, followed by identification and intervention, unlike V2 and V3, which are entirely overlapping. For the participants who are not familiar with dyslexia and have some pre-conception that dyslexia is beyond the mainstream teacher's responsibility, the framing of the messages for dyslexia

awareness should be made more audience-friendly. Simple frame organisation, single focal attribute, and situation which is tailored to the audience personal image, help to reduce the audience's cognitive load and ease the learning process. One of the participants agreed that the information in V1 is easier to understand as it is presented 'one by one.' Besides, the messages in the selected artefacts are conveyed in the English language, the participants' second language. V1 addresses the participants' language needs by enabling the messages in a textual form such as subtitles which appear as communication bubbles which function like post-it-notes. Hence, it reduces the participants' struggles in understanding messages in languages other than their first language.

The finding also provides an essential insight to the researcher and other professional development programmes developer and provider. According to Pierson and Borthwick (2010), the study of framing effect could offer a different perspective in determining the effectiveness of teacher professional development which 'are deemed effective based on teacher self-report and opinion' (p. 127). However, this study reveals that participants' perception of need might not represent the participants' actual need. Thus, providing professional development materials solely based on the need perception may not be sufficient. The findings illustrated that the learners' perception of good materials might be misleading. Hence, developing a TPD based on only the participants' perception may not produce the desired result. In cases where the learners exhibit some misconceptions on the issue highlighted, the messages conveyed in the TPD should be framed as an 'informed prescription' (Schleicher 2007) to the learners.

8.3 Limitations of the Study

The study of the framing is based on three selected artefacts. V1, V2, and V3 are selected because they contain all three important elements in dyslexia awareness campaign within the neurodiversity framework: dyslexia conception, identification, and intervention. The selection of the artefacts was informed by the preliminary findings of the study. The preliminary findings [presented in chapter 4] indicated that the research participants have some misconception related to the nature of dyslexia difficulties. There was also a clear evidence that the participants' misconception is related to neuro-myths. Therefore, the artefacts that contain the neurodiversity framework principles were selected. The two principles are: the nature of dyslexia difficulties and the positive highlights of people with dyslexia [as the evidence indicating dyslexia impairment is not related to lack of intelligence]. Similar dyslexia awareness videos may contain other triggering messages which could better inform the online TPD designers. Besides, the triggering messages identified from V1, V2, and V3 are in the form of videos. This is because, before the study, the researcher piloted several forms of artefacts. However, the participants agreed only to review the

videos. For the study, the researcher regards the participants' refusal to review other artefacts as a sign of 'not triggered' with other forms of artefacts. Hence, all three artefacts employed in the study are all in video format. There are possibilities that other form of artefacts may produce similar or better-triggering messages. Another significant limitation to be highlighted is the lack of learning intervention elaborated in the artefacts selected. Hence, further analysis of the framing of the messages that trigger the participants to learn about dyslexia intervention could not be carried out. Hence, the study is limited by the available content and the types of artefacts.

8.4 Implications of the Study

8.4.1 Implications for Teacher Education

The current study has several implications for teacher education. First, it upholds the effectiveness of transformational professional development as a professional development method to train the reform agents (Norwich 2007; Fraser 2007; Margolin 2011). The findings of the study demonstrate that the transformational professional development approach for teachers' professional development [TPD] on dyslexia support has successfully developed the participants' understanding of dyslexia conception. There was also concrete evidence that shows the participants' enthusiasm in learning dyslexia identification and understanding the need for dyslexia support as social and educational justice to the learners. Studies in policy reformation show that in order to implement a policy reform, the agents' [the teachers] belief and understanding should first be transformed so that it is congruent with the policy aspiration. In order to transform the agents' belief, a transformational TPD is highly recommended. A transformational TPD focuses on establishing the change agents' conception and belief prior to introducing the pedagogical content. Transformation agenda will be supported by the transformation agents only when the agents' belief and conception are established. This is especially challenging as the educators in Malaysia strongly hold onto the integration approach as the best system to support learners with special education needs (IPGIPOH Q6 2019; Selamat Pagi Malaysia 2019). Inclusive education system could only be recognised if the educators' belief on integration system is shifted (Norwich 2007; Reid 2019). As dyslexia is challenging to be identified due to its-hidden nature, more efforts to educate teachers about dyslexia is encouraged to enhance teachers' understanding of dyslexia (Jordan et. al 2009; Howard-Jones 2014; Zadina 2015). It is only when the teachers' understanding about the nature of the disability is established, identification process can be carried out. The identification of learner's diversified learning needs enables the teachers and the schools to provide the right support.

Second, the study shows that conducting a transformational development programme online is effective if the message framing of learning materials can trigger the participants to inquire more knowledge. Conducting a TPD may be costly and timely. In this digital era, many TPDs are offered online, which is much cheaper and more flexible. Moreover, employing online teacher's professional development [oTPD] for dyslexia support would allow more participants' enrolment. An oTPD for dyslexia support could also be utilised in a blended-learning approach which potentially enhances the teachers' learning about dyslexia. However, designing an online professional development programme is challenging as the teachers as learners hold absolute autonomy in deciding on when and how to participate. Even though the participants could be coerced to participate, there are challenges to maximise the learning inquiry. The findings of the current study provide empirical evidence that the teachers are compelled to explore more about dyslexia pedagogical content voluntarily when they are triggered. Thus, in order to design an oTPD, the introductory message should be able to trigger the participants to explore the oTPD content. It is recommended for TPD developers to study and pilot their learning materials in advance.

Third, utilising neurodiversity framework in the oTPD for dyslexia support could deepen the participants' understanding of dyslexia conception. Graby (2015) claimed that neurodiversity framework offers that shift of assumption that provide the balance between impairment perspective and difficulties perspective. It has also made the inclusive education system more sensible. Thus, critical historical and theoretical review of the evolution of dyslexia frameworks would help the education stakeholders – policy makers, teacher educators, parents, and societies- to rethink and re-evaluate their current attitudes towards children with specific learning difficulties or dyslexia as well as their resistance towards inclusion. Furthermore, TPD providers such as British Dyslexia Association and Dyslexia International have recently incorporated the neurodiversity framework. By emphasising the positive highlights of dyslexics, the teachers would be made to understand that dyslexics are not merely lazy or stupid, but instead, dyslexics may be found to not perform well academically largely due to them being poorly supported or even worse, not identified. By highlighting the dyslexic's different learning traits, the teachers would be made to understand that dyslexic learners learn in the ways that they can learn – not merely the learning styles they preferred.

8.4.2 Implications for Malaysian Education Policy

Past researches indicated that mandatory policies are essential supports for effective implementation of an inclusive policy. Sadly, the new Malaysian Zero Reject Policy confirmed that educators and the policy makers in Malaysia advocate integration system for learners with

specific learning difficulties such as dyslexia (IPGIPOH Q6 2019). Findings from the teachers' learning inquiry [see chapter 5] indicate that the participants understood that several changes need to be made in order for the teachers to support their learners' learning needs, most notably at the level of the policy makers first, for the dyslexic learners to reap benefits from. The participants realised that huge changes need to be done first at the policymakers' level in order for the changes at school and classroom level to be implemented.

First, the participants understood that learners' learning difficulties could, in truth, be hidden; that they need to be identified, and that these learners need essential support. The earlier the difficulties are identified, the earlier the support could be provided. Ideally, the learners' learning profiles should be completed before the learners embark on secondary and tertiary education.

The participants suggested that the following complexity of Malaysian mainstream primary schools' system affect the observation for learners' profiling process:

- The current class size in most government school is big. Most classrooms accommodate 40 students. With a large number of students in a classroom, the teachers could not get-to-know their learners well. It is suggested that the maximum limit for each class be reduced.
- There are too many subjects taught in primary schools. Each subject is taught by teachers who are specialised in the subjects. Thus, the students will meet more than one teacher in a day. Each teacher usually spends 30 minutes to 1 hour per class per day. With reduced contact time with the learners, teachers find that they are prevented from establishing more personal, meaningful teacher-learner relationship. It is suggested that the number of subjects is reduced.
- The workload for teachers in Malaysia is among the highest in the world. There are small actions taken upon the teachers' complaints regarding clerical and administrative burdens. As a result, the teachers are still currently burdened with clerical and administrative workloads.

Second, prominent researchers in the learning difficulties discipline suggested that all teachers need to be trained with fundamental specific learning difficulties [dyslexia] support skills (Reid 2016). On top of that, the researcher would like to recommend that remedial teachers be given specialised practitioner training and be upgraded as fundamental specific learning difficulties [dyslexia] specialists. At least one fundamental specific learning difficulties [dyslexia] specialist or practitioner, possibly the locals, should be allocated at each district in Malaysia. This being said, the government needs to allocate a certain amount of funds for the teachers' professional development programmes. As the basic skills for specific learning difficulties [dyslexia] support

are compulsory for all teachers, the policymakers could consider employing an online teachers' professional development programme for dyslexia support, tailored to the Malaysian teachers' current zone of proximal development. An online TPD would allow higher enrolment at a lower cost and with greater flexibility.

Third, many research demonstrates that policy reformation requires transformational professional development. The current study provides evidence that transformational professional development is useful for changing the Malaysian teachers' beliefs in supporting learners with learning difficulties; and increase the teachers' preparedness for identification and intervention in mainstream schools - a transformation that benefits the implementation of inclusive education in Malaysia. On the other hand, a transmissive professional development will increase numbers of testing and assessments for students and the teachers alike, as a method of effectiveness measurement. This will stress out the teachers who are mentally unprepared for the changes and subsequently, affect the students in many different ways. The transformational professional development focuses on establishing the reform agents' belief and conception before transmitting the pedagogical input so that the reform agents clearly understand the 'know-what,' 'know-how,' 'know-why,' 'know-when' and 'know-who' that is concerned of the transformation. The teachers' conception and belief establishment for particular policy reform are evaluated holistically based on their changes in belief and perceptions; not via testing that evaluates their 'know-what' and 'know-how' skills. It is highly recommended that The Malaysian Ministry of Education re-evaluates its current teachers' professional developments programmes. Due to the evolution in research on specific learning difficulties, the TPD providers and developers in Malaysia is recommended to utilise the neurodiversity framework. The neurodiversity-based-oTPD for dyslexia [specific learning difficulties] support could deepen the participants' understanding of dyslexia [specific learning difficulties] conception.

During the study, the researcher was invited to speak about her research findings to the senior management at Ministry of Education, Malaysia: The Executive Director for the Ministry Transformation and the Executive Director for System Structure. Issues related to teachers' professional development was discussed. Among the suggestions given to the Malaysian Ministry of Education was to engage with a TV producer, who was also at the meeting, to produce a series of short videos to introduce and promote deeper understanding of inclusive education to the public. The video series will cover different aspects of inclusion, including specific learning difficulties (SpLD) or dyslexia. The notion for the video productions was to raise the inclusion awareness among the societies by inducing sets of background knowledge in subtle ways. The SpLD episodes will be utilised as learning materials for online teacher professional development [oTPD] for dyslexia or SpLD. See Appendix N for more details of oTPD for dyslexia Inclusion.

8.5 Recommendations for Future Research

The findings of the study show that the effect-of-being-an-ignorant-teacher frame triggered the participants the most. It is also proven that the other three triggering messages support the participants' learning about dyslexia. The findings provide an insight for researchers and practitioners of SpLD to design materials, e.g. short video productions, intended for any transformational professional development programmes related to providing support for dyslexia and other specific learning difficulties in Malaysia as well as other countries that seek to find the balance to the dilemma of inclusive education for learners with specific learning difficulties.

For future research, it is recommended that more research ~~to~~ be conducted to evaluate the teachers' beliefs transformation and dyslexia [specific learning difficulties] conception establishment after viewing the video produced.

Previous literature shows that TPD is one of the challenges that delay the successful implementation of inclusive education for learners with special needs in developing countries. Previous studies also show that message framing plays an essential role in policy reform (Drakulich and Kirk 2016; Ganegoda and Folger 2015; Lingard 2010). Therefore, more studies on message framing in other countries could enrich the literature on how messages can be framed for teachers' learning about dyslexia. In this way, every country could learn from each other and create an international conversation to better understand how inclusive education could be best implemented.

8.6 The Researcher's Reflections

Throughout the study, the researcher has learned that all the teachers in the study have some knowledge of dyslexia but many with some substantial misconceptions. However, the misconceptions could be corrected if the messages conveyed via the teachers' professional development are carefully framed in-line with the audience's background knowledge and their aimed aspirations. In fact, not only that it could amend the teachers' misconceptions, but it could also prompt them to learn more comprehensively about dyslexia conception and dyslexia support. Although the teachers did not show confidence in providing the teaching intervention, the researcher believes that it is due to the limitation of the artefacts made available in this study themselves. In the future, further exploration of the dyslexia intervention messages could be conducted.

The researcher was delighted that there have been opportunities to present the preliminary findings in international conferences [see appendix O]; write published papers [see appendix O];

and engage with people involved in developing resources and policies relating to the education of teachers in Malaysia [see appendix N]. Because of the extensive engagement in this work, the researcher has gain a deeper insight and a better understanding of the values of oTPD.

Most importantly, the researcher has learned that online teacher's professional development [oTPD] can be a useful training platform provided the resource developers understand how to frame the messages in-line with the audience's background knowledge and the aimed aspirations. The researcher's doctorate journey is precious. It has not only given the researcher a hope to contribute to a better oTPD for dyslexia provision but most importantly, hope to find justice for students with dyslexia.

Appendix A: Interview Protocol

1) The pre-message framing phase: Facebook postings by RA^a and RA^b

First posting – Teachers' experience and belief on literacy screening (LINUS):

- i. Do you enjoy conducting LINUS? Why?
- ii. Do the students show any improvements after the LINUS programme?
 - a. In your opinion, what is contributing towards the improvement?
 - b. What do you think are the reasons for the students who do not improve in reading, writing and counting?
- iii. How can students improve in all these three skills?

Second posting- Teachers' dyslexia awareness:

- i. Are you able to identify learning difficulties?
- ii. If the students have learning difficulty, what would you do to assist the student?
- iii. Have you heard of Dyslexia?
- iv. Do you think Dyslexic child could perform well in academics?
- v. Do you think the Dyslexic child should study with their friends in the mainstream classes? Why?

2) The message framing phase: Semi-structured interviews for artefacts reflection

- i. What is your first impression about the message delivered?
- ii. What is the most interesting information? Is there any new information?
- iii. If you were to participate in online training on Dyslexia, which artefact would you choose as the learning materials?
- iv. Have you been thinking about the artefacts that you have viewed?
- v. What were you thinking?
- vi. What do you feel about ... (things the participant mentioned in question iii)?
- vii. What would you do if you ...?

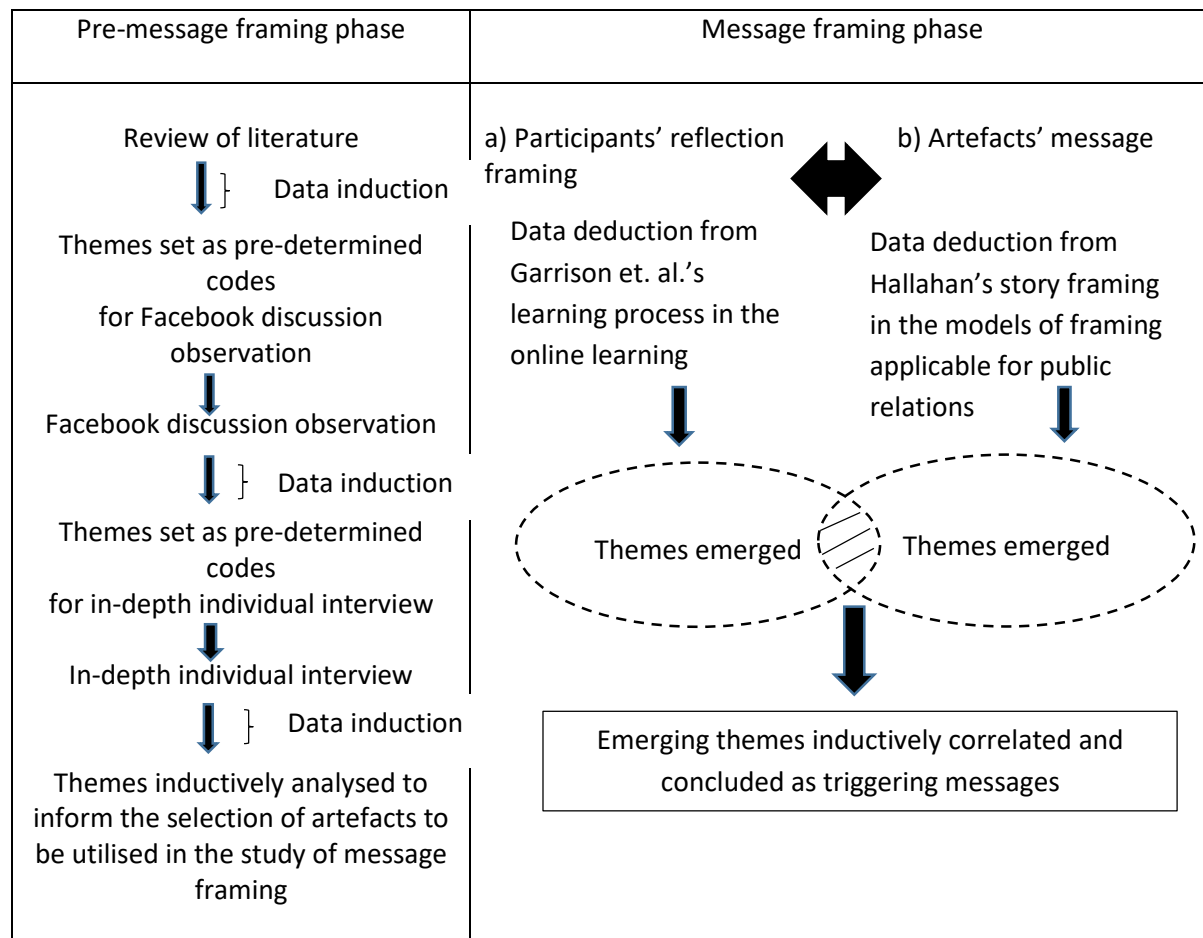
Appendix B: Data Analysis Process

Appendix B has two parts:

B-i) Flowchart illustrating the hybrid approach to the data analysis.

B-ii) Data analysis process.

B-i) Flowchart illustrating the hybrid approach to the data analysis.



B-ii) Data analysis process.

Data Analysis Process

R8 Respondent: The movie touches on emotional value - guna emotional compass to get audience 'feel' the movie

R8 Respondent: Klu akk's video tu is a focused and straightforward exposure to ppl who are dyslexic

Interviewer: So for intro to dyslexia awareness for teachers online CPD, mana better?

R8 Respondent: Klu nk tny mana yg helpful in understanding the condition of dyslexic ppl - i'd say your videos

Interviewer: Straightforward means?

R8 Respondent: Sbb more specific, ada input from those yg dyslexic

Interviewer: Kalau takde input from those yg dyslexic tu kurang ke?

R8 Respondent: Klu the movie, kita yg kena 'guess' apa feeling/needs the kid in the movie

Interviewer: Ahaa..... lambatalah nak sampai eh?

R8 Respondent: Yes dan might be clouded by our emotions

Interviewer: Ok

Interviewer: Akak nak wrap up teachers' reflections. Tu yg nak dgr sendiri comment respondents yg mana dia suka

Interviewer: ☺

R8 Respondent: Okay kak

R8 Respondent: Hehehe

R8 Respondent: How's akk's phd kak? Hihi i'm so in a limbo dim 2-3 bln ni i am really sorry kak

A) From interview scripts to tree diagram



B) From tree diagram to excel [main/raw themes]

B) From excel to word table [subthemes]

Respondent	Subtheme	Translation
R1	Reflects behaviour	Reflects behaviour
R2	Helps me in knowing my students better, in recognizing who is having dyslexia problem. My child shows a few act similar to dyslexia but he seems to not having problem in reading.	Helps me in knowing my students better, in recognizing who is having dyslexia problem. My child shows a few act similar to dyslexia but he seems to not having problem in reading.
R3		
R4		
R5		
R6		
R7		
R8		
R9	It's not a disease and nothing to be afraid of. Why? Because it does not affect the intelligence of the kids in other way. Maybe he/she can't read and having difficulty in reading words and phrases but there are many ways we can do to help them. The most important we detect it earlier and help the children in solving it, never put down the children and never hurt their feeling if they can't read. Remember that every children is different.	It's not a disease and nothing to be afraid of. Why? Because it does not affect the intelligence of the kids in other way. Maybe he/she can't read and having difficulty in reading words and phrases but there are many ways we can do to help them. The most important we detect it earlier and help the children in solving it, never put down the children and never hurt their feeling if they can't read. Remember that every children is different.
R10	It's easier to identify dyslexic kids...	It's easier to identify dyslexic kids...
R11	Belah belah muslim marginal dyslexic kids in 1st lang. classrooms than foreign lang? Are there differences in the symptoms between first language classrooms. Many of the symptoms can be found in my kids who are not only behind in english but struggled in 1st lang as well. We need something that can help kids with effects on their acquisition of 2nd language skills. In terms of english classrooms, it is rather difficult to identify what contributes to pupils' difficulties in reading and comprehension. Some of the symptoms are those involve reading.	Belah belah muslim marginal dyslexic kids in 1st lang. classrooms than foreign lang? Are there differences in the symptoms between first language classrooms. Many of the symptoms can be found in my kids who are not only behind in english but struggled in 1st lang as well. We need something that can help kids with effects on their acquisition of 2nd language skills. In terms of english classrooms, it is rather difficult to identify what contributes to pupils' difficulties in reading and comprehension. Some of the symptoms are those involve reading.

Appendix C: Synopsis of the Artefacts Utilised in the Study

Synopsis: Dyslexia Explained [V1]

Dyslexia Explained: What's it like Being Dyslexic is a short animation video. This comic tells the story of a kid with dyslexia struggling at school based on the school experience of the CEO of Nessy Learning. The child named Tom has difficulty to read. This difficulty affects his ability to write. However, the classroom teacher, Mr. Teasewell failed to identify Toms' real problem. The teacher assured Toms' mother that it was a normal behaviour for boys at Toms' age. After a year, Tom's mother seeks for a psychologist help. Toms was diagnosed with dyslexia. Mr. Teasewell apologised to Tom and promise to accommodate his learning needs.

Synopsis: Dyslexia a Hidden Disabilities [V2].

Dyslexia: A Hidden Disability is a documentary about children and successful adults who have dyslexia. It features interviews with popular personalities like Steven Spielberg, Charles Schwab, Whoopi Goldberg, Sally Shaywitz, and Craig Watkinson. There several other professionals interviewed as well. They are specialist medical practitioner, lawyer, accountant, professor, and attorney. During the interviews, these professionals shared about their experience and difficulties as people with dyslexia in early years. However, with some helps, they have proven that they could do well in various fields not only in arts but also in academics. There is also a scientific explanation of what dyslexia is about by Sally Shaywitz, the Co-Director at Yale Center for Dyslexia and Creativity. This documentary is a part of marketing programme for Westmark School, in United States of America, a private school that cater the needs for children with dyslexia. Although this movie does not promote inclusion, it captures the real evidence of successful dyslexics to prove that dyslexia has nothing to do with lack of intellectuality. It also informs the changes that a school and an educational system need to embrace in order to accommodate people with dyslexia.

Synopsis: Tare Zameen Parr [V3]

Taare Zameen Par, a Hindi movie, explores the life of a dyslexic child named Ishaan at home and in school. Ishaan is the youngest child of the family. He was born into a middle class family. The father is a professional while the mother is a housewife. It shows a typical patriarchal Asian family. Ishaan's problem was viewed as a disciplinary problem due to his position as the youngest son, pampered by a stay-at-home mother. At school, Ishaan's problem has been understood as an attitude problem. He was accused to be lazy and playful. As a solution, Ishaan was sent to a boarding school where he could learn about discipline. Ishaan refused to speak ever since he was

left at the boarding school. The plot twisted when a substitute teacher who teaches at a special needs school teaches Ishaan and realised that Ishaan is dyslexic. It's the teacher's effort to support and accommodate Ishaan's learning that changes Ishaan and enables him to learn better.

Appendix D: Risk Assessment Form



Risk Assessment Form

- Please see Guidance Notes at the end of this document.
- *Students:* Please make sure you have discussed this form with your supervisor!

Researcher's name:

AIDA BINTI A.RAHMAN

In case of students:

Supervisor's name:

DR. JOHN WOOLLARD

Degree course:

PhD EDUCATION

Part 1 – Research activities

What do you intend to do? *(Please provide a brief description of your study and details of your proposed methods.)*

Research on teachers' awareness and understanding of learning difficulties and disabilities show that teachers, especially in developing countries lack the understanding of real meaning of learning difficulties and disabilities (Ajoku-Christopher, 2012; Dzalani and Shamsuddin, 2014; Chong and Graham, 2016). This suggested that current Teacher Professional Development (TPD) or Continuing Professional Development (CPD) has succeeded in communicating knowledge awareness of learning difficulties and disabilities to teachers but demanding more research on how to deliver the messages that reach the teachers' meta-awareness. For this study, I will be using Dyslexia as the TPD/CPD context. Hence, the aims of this study are to identify types of messages that communicate with meta-awareness and to understand how these messages react with meta-awareness on dyslexia in Malaysia.

Methods:

This research will utilise a qualitative methodology of data collection, presentation and discussion of the research findings. Data for this study will be obtained from Malaysia via online communication: Online focus group interview transcriptions, and online respondents' reflective writing. The findings from the online focus group interviews and respondents' reflective writing will be triangulated with the documents analysis. Respondents will take part in online training conducted over two weeks. Selected participants (50 primary school teachers in Malaysia) will take part in the online training activity, designed using Facebook's Secret Group platform. During the activity, participants will view the documents and reflect their cognitive and affective responses while responding to the documents via Facebook's Secret Group. Reflection template will be given to the participants prior to the activity (refer to Reflection Template). Each week, participants will discuss on the assigned topics (refer to Course Outline) via Facebook's Secret Group. Questions for the focus group discussion/ interview derived from the reflection questions (refer to Group Discussion Questions). The discussion will facilitate the participants in their reflective writing activity. Conversations during the discussions will be transcribed and analysed. Written documents/ reflections from the participants emailed to me each week will be recorded and analysed. Should there be any need for further clarification on responses given by the participants during the focus group discussion and/or reflective writing, an individual interview will be arranged to seek an in-depth explanation. All interviews/ discussions will be conducted via social media chatting platform. Data from the group discussions, individual participants' reflective writings and individual participants' interview (should there be any) will be analysed and interpreted to identify:

1. The types of messages that effectively communicate to participants' meta-awareness.

2. The types of messages that mislead participants' meta-awareness.

To understand how the messages communicate with the participants' meta-awareness, the documents analysis will be conducted. Findings from the documents analysis will be triangulated with the findings from the interviews and participants' reflective writings.

References:

Ajoku-Christopher, O.A., 2012. Factors influencing the lack of dyslexia awareness and its impact on inclusive learning in selected primary schools in Owerri West Local Government Area, Imo state, Nigeria (Doctoral dissertation, University of Greenwich).

Chong, P.W. and J. Graham, L., 2016. Discourses, decisions, designs: 'Special' Education policy-making in New South Wales, Scotland, Finland and Malaysia. *Compare: A Journal of Comparative and International Education*, pp.1-18.

Dzalani, H. and Shamsuddin, K., 2014. A Review of Definitions and Identifications of Specific Learning Disabilities in Malaysia and Challenges in Provision of Services, *Pertanika J. Soc. Sci. & Hum.* 22 (1): 1 - 18 (2014)

Will your research involve collection of information from other people? *(If yes, please provide a description of your proposed sample.)*

Research participants will involve mainstream teachers teaching at primary schools. The research will involve two groups of teachers:

- 1) During the selection process – Two research assistants will post issues on Dyslexia Identification and Intervention on their Facebook walls. Every teachers' comments on the issues will be recorded and analysed. Teachers who are less aware of issues on *Dyslexia* will be identified and approached to participate in an online training activity.
- 2) Two-week Online Training Activity – 50 teachers who agreed to take part in the activity will scrutinise documents (text, video, audio) presented and write about their cognitive and affective responses in a reflection journal. The researcher will conduct a group discussion with the participants via social media chatting platform as agreed by all participants (Facebook/ WhatsApp/ Telegram) every week. Group discussions/ interviews will help the participants to clarify their responses. For in-depth analysis, the researcher will interview the participants individually.

Since the purpose of the interviews is to clarify respondents' feedbacks on the strengths and weaknesses of the messages in the documents- not to assess the respondents – the analysis of respondents' body language and expressions is not necessary. Hence, interviews will be conducted via online chatting platform.

If relevant, what locations are involved? *(Please specify which country/region/place you will be working in, and details of where data collection activities will take place (e.g. public or private space).)*

- Data will be collected online. Opportunities will be given to all primary school teachers all over the country.
- Activities will be conducted online via social media.

Will you be working alone or with others in the data collection process?

- I will work alone for the actual data collection process. The data will be collected from the teachers who participate in the online training activity and the documents scrutinised during the activity. However, this is not lone-working. I will be at a computer station in a staffed work area or in my own home.

- However, in order for me to identify the potential participants, I will need help from two teachers. As insiders, the teachers will invite neutral and sincere responses from their colleagues. The teachers will help with posting questions on their Facebook walls. I will screen the potential participants from the comments thread. I will approach, introduce myself and explain about the research prior to the activity.

Part 2 – Potential risks to YOU as the researcher

Please specify potential safety issues arising from your proposed research activity. (*Give consideration to aspects such as lone working, risky locations, risks associated with travel; please assess the likelihood and severity of risks.*) If you have already completed a departmental H&S risk assessment, this may be attached to cover these aspects.

I do not foresee any potential safety risk from this research activity as I will not be travelling nor utilise any hazardous materials.

What precautions will you take to minimise these risks?

Not applicable.

Please specify potential distress or harm to YOU arising from your proposed research activity. (*Give consideration to the possibility that you may be adversely affected by something your participants share with you. This may include information of a distressing, sensitive or illegal nature.*)

- 1) Dyslexia is an issue that is debatable and questionably defined. Despite all the arguments, experts agree upon the existence of dyslexia and the importance of the awareness issue. However, the participants may express their opinion on certain stances or highlighting certain policies. Hence, there is a possibility that I will be questioned for interfering with specific policies or technical skills related to dyslexia.

What precautions will you take to minimise these risks?

- 1) I will make sure that the discussion and information given by the participants will remain confidential and only responses related to the awareness will be analysed and presented. Hence, there should not be any accusation of interfering with specific policies or technical skills related to dyslexia imposed on me.
- 2) I have carried out the resources reliability analysis and validated the documents with the experts in the area (Special Needs Education) to ensure the information is correct and suitable. I have also ensured that the documents utilised are permitted for public sharing.

Part 3 – Potential risks to YOUR RESEARCH PARTICIPANTS

Please consider potential safety risks to participants from taking part in your proposed research activity? (*Give consideration to aspects such as location of the research, risks associated with travel, strain from participation, and assess the likelihood and severity of risks.*) If you have already completed a departmental H&S risk assessment, this may be attached to cover these aspects.

I do not foresee any potential safety risk from this research activity as the participants will not be travelling nor utilise any hazardous materials.

What precautions will you take and/or suggest to your participants to minimise these risks?

Not applicable.

Please specify potential harm or distress that might affect your participants as a result of taking part in your research. (*Give consideration to aspects such as emotional distress, anxiety, unmet expectations, unintentional disclosure of participants' identity, and assess the likelihood and severity of risks.*)

1. As the participants are required to allocate certain amount of times for the online activity, their willingness to participate suggested that they will be burden with extra working hours.
2. During the group discussions, participants will reflect their experience scrutinising the documents. Participants might not be able to recall all events and may result in anxiety.
3. Since the interviews will be carried out using social media platform as agreed by all participants, the participants' profile names will appear in the chat box. This will be a risk for unintentional disclosure of participants' identity.

What precautions will you take and/or suggest to your participants to minimise these risks?

1. Participation in this activity will be based on voluntary basis. Participants will be briefed prior to the activity. Participants who volunteered to participate will understand what they will be involved with. Participants will be explained that the activity will commence for two weeks. The researcher has ensured that the amount of time for the participants to scrutinise the compulsory documents selected for each week will not exceed more than two hours. Participants will be given six (6) days or 144 hours to go through the documents. Participants will spend approximately 1.4 % of their times for the research. Should the participants be interested to explore more documents for better understanding, they will be encouraged to do so on their own willingness. Responses on the time allocated by the participants during this feasibility study will determine the actual amount of documents that are ideal for the actual study. Should the participants need more time to accomplish the activity, arrangements will be made so that their needs will be accommodated.
2. Participants will be given a form that contains 5 items to guide them write their reflections during the activity. Group discussions will be based on the topics written in the guideline.
3. Participants' feedbacks will be transferred to Microsoft documents. Researcher will make amendments to the participants' profile names and replace with codes.

Part 4 – Potential wider risks

Does your planned research pose any additional risks as a result of the sensitivity of the research and/or the nature of the population(s) or location(s) being studied? (*Give considerations to aspects such as impact on the reputation of your discipline or institution; impact on relations between researchers and participants, or between population sub-groups; social, religious, ethnic, political or other sensitivities; potential misuse of findings for illegal, discriminatory or harmful purposes; potential harm to the environment; impacts on culture or cultural heritage.*)

Scrutinising the documents might lead to the owners of the published documents' anxiety.

What precautions will you take to minimise these risks?

The aim of using the documents is to understand messages that featured benefits, threat and severity of the issues related to dyslexia; as well as barriers to implement its intervention (based on Health Belief Model's criteria. The overall quality of the documents will not be judged and challenged. Hence the reputation of the documents' owner will not be criticised. The owner of the documents has been contacted and informed about the study. The owner has given his approval for his modules to be utilised and studied.

CONTINUED BELOW ...**Part 5 – International Travel**

If your activity involves international travel you must meet the Faculty's requirements for Business Travel which are intended to:

1. Inform managers/supervisors of the travel plans of staff and students and identify whether risk assessment is required.
2. Provide contact information to staff and students whilst travelling (insurance contact details, University contact in case of emergency etc.)

Full details are provided in the [Faculty H&S Handbook](#) in the **Business Travel** section. Selecting **Business Travel** from the Contents list will take you straight to the relevant section.

Departmental H&S risk assessment attached (for Part 2/3)	YES / NO	(Delete as applicable)
Business Travel and Risk Filter Form attached (Part 5)	YES / NO	(Delete as applicable)

Appendix E : **Consent Form**



CONSENT FORM

Study title: Understanding Communication and Meta-Awareness: Educational Affordances of Dyslexia Awareness in Malaysia.

Researcher name: Aida Binti A Rahman

Ethics reference: 24854

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (**v3.0 March 8th 2017**) and have had the opportunity to ask questions about the study. ☐

I agree to take part in this research project and agree for my data to be recorded and used for ☐

I understand that my responses will be anonymised in reports of the research ☐

I understand my participation is voluntary and I may withdraw at any time without my legal rights being affected ☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study.

Name of participant (print name).....

Signature of participant.....

Date.....

Appendix F : Ethics Application Form

SSEGM ETHICS SUB-COMMITTEE APPLICATION FORM

Please note:

- **You must not begin data collection for your study until ethical approval has been obtained.**
- ***It is your responsibility to follow the University of Southampton's Ethics Policy and any relevant academic or professional guidelines in the conduct of your study. This includes providing appropriate information sheets and consent forms, and ensuring confidentiality in the storage and use of data.***
- ***It is also your responsibility to provide full and accurate information in completing this form.***

1. **Name(s):** AIDA BINTI A.RAHMAN

2. **Current Position** RESEARCH STUDENT

3. **Contact Details:**

Division/School EDUCATION

Email A.Binti_A_Rahman@soton.ac.uk

Phone 07 490591569

4. **Is your study being conducted as part of an education qualification?**

Yes ☒ No ☐

5. **If Yes, please give the name of your supervisor**

DR JOHN WOOLLARD

6. **Title of your project:**

Understanding Communication and Meta-Awareness: Educational Affordances of Dyslexia Awareness in Malaysia.

7. **Briefly describe the rationale, study aims and the relevant research questions of your study**

Research on teachers' awareness and understanding of learning difficulties and disabilities show that teachers, especially in developing countries lack the understanding of real meaning of learning difficulties and disabilities (Ajoku-Christopher, 2012; Dzalani and Shamsuddin, 2014; Chong and Graham, 2016). This suggested that current Teacher Professional Development (TPD) or Continuing Professional Development (CPD) has succeeded in communicating knowledge awareness of learning difficulties and disabilities to teachers but demand more research on how to deliver the messages that enhance real understanding. For this study, I will be using Dyslexia as the TPD/CPD context. Hence, the aims of this study are to identify types of messages that communicate with meta-awareness and to understand how these messages react with meta-awareness on dyslexia in Malaysia.

This study intends to answer the following questions:

1. Which inputs are necessary to be introduced to teachers in Malaysia in order to raise their meta-awareness on dyslexia?
2. Which types of messages conveyed in the input communicate to teachers' meta-awareness?
3. How do the messages communicate with the teachers' meta-awareness?

Methods:

This research will utilise a qualitative methodology of data collection, presentation and discussion of the research findings. Data for this study will be obtained from online communication, focus group interview transcriptions, respondents' reflective writing and documents analysis. Data will be collected through online training conducted over two weeks. Selected participants (50 primary school teachers in Malaysia) will take part in the online training activity, designed using Webinar platform. During the activity, participants will view the documents and reflect their cognitive and affective responses while responding to the documents. Reflection template will be given to the participants prior to the activity (refer to Reflection Template). Each week, participants will discuss on the assigned topics (refer to Course Outline) via social media chatting platform such as *Facebook* or *WhatsApp* (platform will be decided based on all participants' conveniences). Questions for the focus group discussion/ interview derived from the reflection questions (refer to Group Discussion Questions). The discussion will facilitate the participants in their reflective writing activity. Conversations during the discussions will be transcribed and analysed. Written documents/ reflections from the participants, emailed to me each week, will be recorded and analysed. Should there be any need for further clarification on responses given by the participants during the focus group discussion and/or reflective writing, an individual interview (online) will be arranged to seek an in-depth explanation. All interviews/ discussions will be conducted via social media chatting platform. Data from the group discussions, individual participants' reflective writings and individual participants' interview (should there be any) will be analysed and interpreted to identify:

3. The types of messages that effectively communicate to participants' meta-awareness.
4. The types of messages that mislead participants' meta-awareness.

To understand how the messages communicate with the participants' meta-awareness, the documents analysis will be conducted. Findings from the documents analysis will be triangulated with the findings from the interviews and participants' reflective writings. Findings from

References:

- Ajoku-Christopher, O.A., 2012. Factors influencing the lack of dyslexia awareness and its impact on inclusive learning in selected primary schools in Owerri West Local Government Area, Imo state, Nigeria (Doctoral dissertation, University of Greenwich).
- Chong, P.W. and J. Graham, L., 2016. Discourses, decisions, designs: 'Special Education policy-making in New South Wales, Scotland, Finland and Malaysia. *Compare: A Journal of Comparative and International Education*, pp.1-18.
- Dzalani, H. and Shamsuddin, K., 2014. A Review of Definitions and Identifications of Specific Learning Disabilities in Malaysia and Challenges in Provision of Services, *Pertanika J. Soc. Sci. & Hum.* 22 (1): 1 - 18 (2014)

8. Describe the design of your study

This research will utilize a qualitative methodology of data collection, presentation and discussion of the research findings. In this study I seek to understand which types of messages on dyslexia that communicate with the teachers' meta-awareness. The findings will help me develop an action model that will facilitate TPD providers in delivering

Dyslexia basic skills TPD. Using the classical (Glaser) Grounded Theory principles, I will begin the study by identifying and describing the teachers' current knowledge and their knowledge gap related to dyslexia. Findings from the need analysis study, will assist me in the selection of materials for online activity for the teachers. The main purpose of conducting the online activity is to identify the messages that give impact to teachers' cognitive and affective responses and understand how these messages communicate with the teachers' cognitive and affective perspectives.

Need Analysis Study

At this stage, I will assign two research assistants (teachers in Malaysia) to post questions regarding problems with reading and writing) on their Facebook walls. The research assistants (RA) will announce that the questions are meant for a PhD study and those who are willing to share their opinions for this study may participate in the discussion and respond to the post. The responses from the participants will be analysed. This step is important as it helps me to identify the teachers' input to be scaffold and identify the teachers who will participate in the online activity. With this information, Dr. Woollard and I will be able to design the online activity module for TPD in Dyslexia for teachers in Malaysia.

The Effective Messages Study

Selected teachers (50 participants) will take part in the online activity that is expected to be running in two weeks. The training will be using Webinar platform. Documents from Dyslexia International, Basic Skills for Teachers, will be adopted. Every week, the participants will be assigned to view documents on topics as outlined (refer to Course Outline) and discuss the documents using a social media platform agreed by all participants (Facebook, WhatsApp, Telegram). During the discussions, the participants will need to identify messages that are:

1. new;
2. useful;
3. Contradict to previous information they had on dyslexia;
4. Supporting previous information they had on dyslexia.

The participants will be required to keep a journal reflecting on all the issues discussed every week. The participants will also reflect the implications of dyslexia for education/ to their students. Prior to the activity, the participants will receive a template for the journal. At the end of each week, the participants will send their journals to me via email or social media (whichever method convenient to the participants). Should there be any need for further clarification on responses given by the participants during the focus group discussion and/or reflective writing, I will arrange a personal interview (via social media/ chatting platform) with the identified participant.

Data Analysis

Qualitative data will be analysed by using thematic and content analysis with options of using a qualitative data analysis (QDA) computer software package called NVivo. Therefore, data from transcribed interviews will be grouped into various themes and contents informing the research questions for analyses. Data from the weekly discussion on social media, participants' reflections from the journal writing, personal interview and the module documents will be analysed and triangulated. The data will be analysed using the principles and steps of the grounded theory. It involves rigorous procedures in research which leads to emergence of conceptual categories.

9. Who are the research participants?

The research will involve primary school Teachers in Malaysia. It is estimated that fifty participants will be selected for the study.

10. If you are going to analyse secondary data, from where are you obtaining it?

Not Applicable.

11. If you are collecting primary data, how will you identify and approach the participants to recruit them to your study?

Please upload a copy of the information sheet if you are using one – or if you are not using one please explain why.

During the feasibility study, respondents who show commitments in responding to the discussion initiated by the RAs in their Facebooks will be identified. The RAs' helps will be needed at this stage as they are the 'insiders' in the teaching community. The respondents will be the RAs' colleagues from all over Malaysia. The discussions will be conducted in an informal manner whereby the teachers will participate as a small talk over teaching and learning issues. Teachers who have not received an official training on dyslexia will be given priority to participate in the online activity. These teachers will be approached personally by me with the help of the research assistants. Teachers who gave their consents to participate in the online activity, will be recruited. I expect to recruit fifty teachers for the study.

12. Will participants be taking part in your study without their knowledge and consent at the time (e.g. covert observation of people)? If yes, please explain why this is necessary.

No

13. If you answered 'no' to question 12, how will you obtain the consent of participants?

Please upload a copy of the consent form if you are using one – or if you are not using one please explain why.

All my participants will be given consent forms to read and sign. Participants will only take part with their full consent to do so willingly.

14. Is there any reason to believe participants may not be able to give full informed consent? If yes, what steps do you propose to take to safeguard their interests?

All participants will be given clear and open information about the research and will have opportunities to withdraw within 3 days of the group interview session. The data associated with those respondents will not be used in the analysis. The data will be anonymised at the point of receipt using pseudonyms.

As participants will contribute their detailed experiences in this study, I will ensure that the exercise will be purely academic and their identities will be withheld.

- 15. If participants are under the responsibility or care of others (such as parents/carers, teachers or medical staff) what plans do you have to obtain permission to approach the participants to take part in the study?**

Not applicable in this study.

- 16. Describe what participation in your study will involve for study participants. Please attach copies of any questionnaires and/or interview schedules and/or observation topic list to be used**

Participants will write a reflection on the documents they viewed. The items to be reflected will be discussed in group (chatting) via social media every week. Reflection template and group discussion/ interview questions as attached.

- 17. How will you make it clear to participants that they may withdraw consent to participate at any point during the research without penalty?**

The letters of consent are very clear and explicit that participants are free to withdraw within 3 days of the group interview session.

- 18. Detail any possible distress, discomfort, inconvenience or other adverse effects the participants may experience, including after the study, and you will deal with this.**

The participants may assume that their skills will be assessed during the activity and may not be comfortable with the idea of being judged. Prior to this study, I will explain the objectives of the study to the participants. The study aims to understand the types of messages that communicate with the teachers' meta-awareness and explain how the messages communicate to teachers' meta-awareness. The participants will contribute to this study by helping the researcher to assess the messages (not the participants) and share their experiences while communicating with the messages. I will also explain that the input from the participants, will help to inform of the communication practice for future Teachers Professional Development (TPD).

- 19. How will you maintain participant anonymity and confidentiality in collecting, analysing and writing up your data?**

Respondents' views will remain anonymous in all the cases. There will be no need of bringing out the identities of the respondents. In citing the participants' responses as the data, I will replace the participants' identity with assigned code such as T1 (for teacher number 1).

- 20. How will you store your data securely during and after the study?**

The University of Southampton has a Research Data Management Policy, including for data retention. The Policy can be consulted at

<http://www.calendar.soton.ac.uk/sectionIV/research-data-management.html>

All the data collected will be stored with care to protect the confidentiality of participants and institutions. The data will be secured with a strong password which will only be known to me alone and nobody will ever have access to my electronic devices during and

after the data collection. The university computer is also safely secured that it's only I who have access to the data.

21. Describe any plans you have for feeding back the findings of the study to participants.

The participants' name and email address will be recorded and kept on a secure computer. The participants' personal data will only be used for feeding back the findings of the study to participants. After my thesis has been accepted and the research has been published, I will prepare a 1-2 page summary of my research findings and send copies to each one of them.

22. What are the main ethical issues raised by your research and how do you intend to manage these?

The weekly discussions will be conducted via social media platform. To protect the participants' information, a closed-group chatting platform will be created. Only the participants and their colleagues will be invited to join the group. If the participants wish to express their opinions secretly to me, the participants will write it down in their journals as they reflects their experiences.

With these ethical issues in mind, I will draw up an informed consent document in which issues about the research will be explained to every participant. All the participants will be asked to read and sign the document in order to indicate their willingness to participate in this study. The data will be protected from unauthorized access, loss and modification.

23. Please outline any other information you feel may be relevant to this submission.

Nil.

Appendix G: Participation Information Sheet

Participant Information Sheet

Study Title: Understanding Communication and Meta-Awareness: Educational Affordances of Dyslexia Awareness in Malaysia.

Researcher: AIDA BINTI A. RAHMAN **Ethics number:**24854

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

This study is purely academic. It is a fulfilment for my PhD qualification which I am currently pursuing at the University of Southampton in the UK.

The purpose of this study is to understand which messages effectively communicate with teachers' meta-awareness how it happens. This study aims at answering these initial research questions;

1. What types of messages communicate with meta-awareness?
2. How do these messages communicate with meta-awareness?

Why have I been chosen?

This study seeks to understand the effective communication for Teachers Professional Development (TPD) in particular for basic training in Dyslexia. As you are a teacher in one of Malaysian primary school and have been exposed to students' ability in reading and writing, you are found to be the most suitable candidate for the research.

What will happen to me if I take part?

If you agree to participate, you need to complete the consent form and return it to the researcher by whichever medium convenient to you. Upon receiving your consent, the researcher will enrol you for the online activity and invite you to a closed-group social media communication platform for group discussions. Both the online training and group discussions will run simultaneously. The activity will run for a period of two weeks. The start date will be announced by the researcher when all the participants have agreed to begin. Besides the discussion. You are also expected to write a reflection on your experiences while participating in the online activity. The template of the journal will be emailed to you. You will be required to reflect on which information that you found as:

1. new;
2. useful;
3. Contradict to previous information they had on dyslexia;
4. Supporting previous information they had on dyslexia.

You will also reflect the implications of dyslexia for education/ to your students. You will have to email the reflections back to the researcher each week. The information from the chats will be transcribed and your identity will be coded and be kept confidential.

Are there any benefits in my taking part?

Your contributions to this study will help the researcher to assess the messages and understand the communication process. It will also inform the researcher of the communication practice for future Teachers Professional Development (TPD) which will affect you positively in the future.

Are there any risks involved?

The researcher believed that there is no risk in participating in this study.

Will my participation be confidential?

As a researcher, it is my responsibility to comply with the University of Southampton Data Protection Act. All the data collected from the interviews will be stored in a locked facility, accessible to the researcher and the supervisors only. Data will strictly remain confidential. There will be no mentioning of name in any part of the report for this study, although the description about your roles in your establishments might be disclosed.

What happens if I change my mind?

As you have already observed, participation in this pilot study is voluntary. If by any reason you wish to withdraw from this study, you are free to do so. You just need to inform the researcher about your intention to withdraw from participating within 3 days of the group interview session.

What happens if something goes wrong?

For any concerns or complaints about this study, contact: Head of Research Governance (02380 595058, rgoinfo@soton.ac.uk).

Where can I get more information?

If you have any questions about the study, you can contact the researcher or her supervisors. The contact details are;

The Researcher: Aida Binti A Rahman
 Southampton Education School
 University of Southampton
 Email: A.Binti_A_Rahman @soton.ac.uk; aar1d15@soton.ac.uk;
aidarahman@utm.my
 Phone: UK +447490591569

Supervisors: Dr. John Woollard

Southampton Education School
 University of Southampton
 Building 32
 Southampton

SO171BJ United Kingdom

Email: J.Woollard@soton.ac.uk

Dr. Charis Voutsina

Southampton Education School

University of Southampton

Building 32

Southampton

SO17 1BJ United Kingdom

Email: cv@soton.ac.uk

Mr. David Galbraith

Southampton Education School

University of Southampton

Building 32

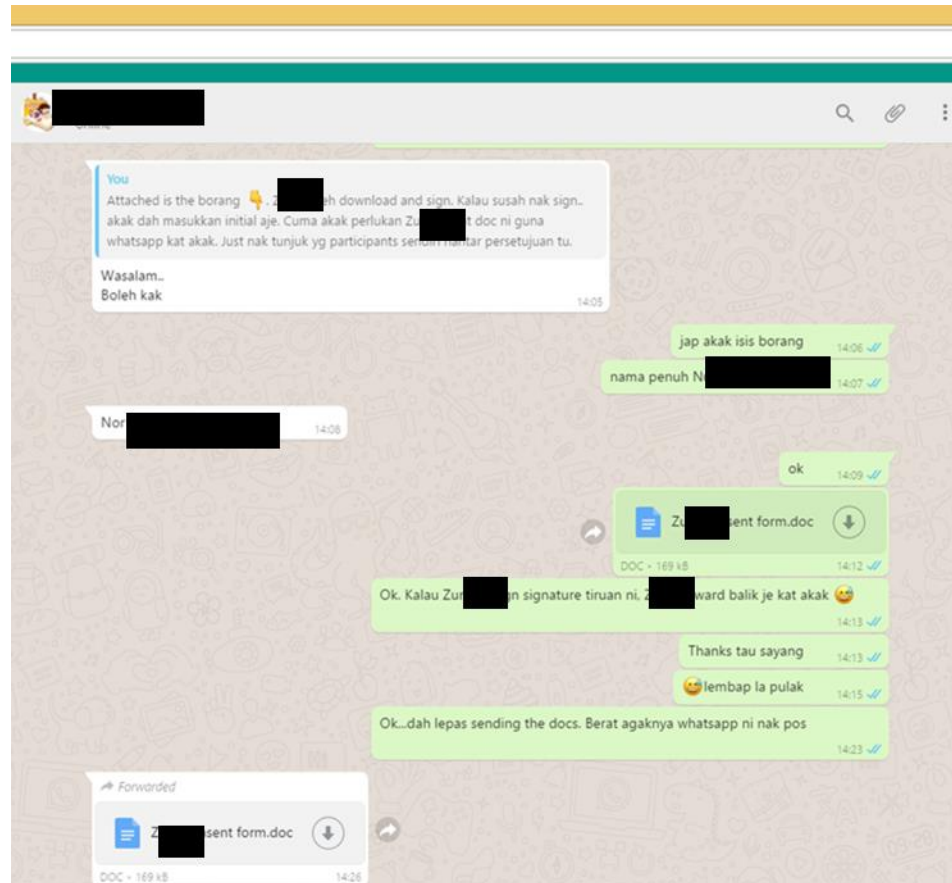
Southampton

SO17 1BJ United Kingdom

Email: D.W.Galbraith@soton.ac.uk

Appendix H: Participants' Consent Procedure

The participants' consent form was forwarded to the participants and received from the participants via WhatsApp.



Appendix I : Interview Script Sample

R8: I studied in the uk and i also was a student in a uk school when my dad further his study. In uk, i had one teacher and a tcher assistant. In msia i hated school because teacher changed hourly

Interviewer: tell me about it

R8: Then, i tend to make troubles in one t's class all the time and ace in another t's class

R8: So if i am the teachers

R8: There are bound to be different report right. In tcher A i will do everything (hence maybe if i'm dyslexic, i'll try to adjust) but in tcher B, i'll drift away

R8: Coz i also read that dyslexic s's can actually adapt to 'normal-style' learning system

R8: Hehe

R8: But

R8: If only one tcher in the class who is with me the whole tim

R8: *time

R8: The report would definitely be different than these 🖱️📄

Interviewer: You came back to Malaysia n enrol school in which year? Notice the difference in the system? besides having only one teacher in UK class....what else do you prefer UK?

R8: I went to uk at the age of 10 , came back from uk age 12

Interviewer: Got to experience secondary school in UK?

R8: Nope. We went back in August hehe

R8: Summet holsss

R8: * summer hols

R8: So end 11 y/o you are already in msia

R8: Sorry 9-11

R8: 2 years

R8: Primary 5 and 6

Interviewer: oo..... Yes in UK, primary school focus on teaching langauge and maths.

Appendix J : Participants' Reflection on V1

Reflection V1: Dyslexia Explained

	Strengths/ weaknesses of V1	Translation	Notes	
R2	V1 good for novice teachers. Since i know a bit about dyslexia, i like V2 more yes it is damn good as an introduction and motivation for teachers to know and handle dyslexia. V1: Saya terfikir tentang betapa ramai sebenarnya bekas anak murid sy yg rupa2nya ada masalah dyslexia. Yg mmg penah sy sendiri label sebagai pemalas. Video 1 is more to what is dyslexia Movies for motivation. Those short video clips for better understanding. Dari segi animation, yes it is damn good as an introduction and motivation for teachers to know and handle dyslexia.	It reminds me of the number of my students who might be dyslexics which I myself labelled them as lazy.	What's being dyslexics	<p>Commented [BAA1]: Good for novice teachers</p> <p>Commented [BAA2]: Introduction to dyslexia</p> <p>Commented [BAA3]: What's being dyslexic- description</p> <p>Commented [BAA4]: Motivates teachers</p> <p>Commented [BAA5]: For better understanding</p>
R3				
R4	Yup...enjoy sket R4: Klu facts je...ayat pun high level...berpusing gak otak nk memahami Dgn video animasi psl nk bgtau people about their disabilities tp hard to do	Yup...enjoy more If only facts..high level phrases...it spins my head trying to understand. With the animation video tell people about their disabilities but hard to do.	Disadvantage	<p>Commented [BAA6]: Enjoy to watch</p> <p>Commented [BAA7]: Simple to understand/ simplicity</p>
R7	Bila melihat video ini sy faham bahawa mungkin seorg murid saya yg sgt lambat menulis dan tdk mengikut sebutan guru sama sekali mgkin mempunyai masalah dyslexia...	When watching this video I understand that maybe one of my student who is very slow in writing and can't follow teacher's pronunciation at all might have problems with dyslexia		<p>Commented [BAA8]: Definition</p>
R9	Honestly, from the Hindi movie I understood about the people who have dyslexia. In the term to learn about dyslexia, video 1&2 you shared more clear and suitable to understand about this R9: From the Hindi movie I understood a few part of dyslexia but from the movie you shared I learn more R9: From the short video I learn about the concept. Because before this i'm not too clear about dyslexia. I'm always confuse it with autism. Even though in my school, we have 5 classes for special kids with problem in learning, their problems are different.		BUT Other respondents seem to be confused.	<p>Commented [BAA9]: Clear understanding</p> <p>Commented [BAA10]: Learn the concept – differentiate with autism</p>
R11	1. The most impactful would be the 1st video. 2. The first is better for raising awareness. Good intro for teachers and parents to make them think deeper when faced with similar cases. The second video is definitely			<p>Commented [BAA11]: Balance awareness</p>
R12	the next steps to check if it really is a case of dyslexia I think the checklist would be more beneficial in school settings. So, as a teacher i would pick the checklist. The criteria is described explicitly and focuses more to learning process in the classrooms (Primary School Dyslexia Checklist by The Dyslexia Association www.dyslexia.uk.net *** R10 found it very useful too)			

	Reflects: emotion (triggering)	Translation	
R2	<p>Anak murid ramai yg ada ciri2 dyslexia dulu. Tapi masa tu x tahu pun apa2 ttg ni. I would label my students as 'lazybump'. Until I met a few foreign teachers in a chat group 10 years ago. They were talking about it when I asked how to help these 'lazy' students.</p> <p>It brought me back to my first few years as a novice teacher. I feel guilty and sad a while after watching this. Not exactly (treating them like Mr TEaswell but but I did label a few students as 'lazybump'). They are genius in certain parts. I prefer to find solutions to the problems rather than finding out the cause of their problems. Saya terfikir tentang betapa ramai sebenarnya bekas anak murid sy yg rupa2nya ada masalah dyslexia. Yg mmg penah sy sendiri label sebagai 'pemalas' seperti guru dim video itu. Bila semua murid dapat hasil memberangsangkan kecuali seorg murid. Dlm hati dan fikiran pasti guru rasa bukan silap dia mengajar tapi murid tu yg mmg malas. Hakikatnya tidak. Sedih. Kerana masih ramai kanak2 yg ada masalah dyslexia dianaktirikan oleh guru dgn label 'budak pemalas'</p>	<p>Many of my students showcase characteristics of dyslexia. At that time xknow anything about this. I would label my students as 'lazybump'. Until...</p> <p>I was thinking about how many of my ex-students are actually dyslexic. Whom I have actually labelled them as lazy like the teacher in the video. When all but one student perform well. In the heart and mind of a teacher definitely it wasn't his/her teaching that is the problem. Well, the truth is not. Sad. Because there are many children who are dyslexics been marginalised and labelled as 'lazy kid'. The kid has to pretend so that he can skip school. School is not a fun place for the kid.</p>	<p>Commented [BAA16]: Teachers associate themselves with Mr Teaswell.</p> <p>Commented [BAA12]: Discussing problematic and lazy students are common among teachers</p> <p>Commented [BAA13]: Feel guilty and sad</p> <p>Commented [BAA14]: Associating self with the teachers in the video</p> <p>Commented [BAA15]: Finding solutions without findings out the problems.</p> <p>Commented [BAA17]: How teacher's reflect their teaching. Quantitatively – if majority are ok- I am ok. Those who are not ok, it's their own fault. Ever think about why they are not ok?</p> <p>Commented [BAA18]: A scene that raised empathy</p>
R3	<p>Budak tu terpaksa berlakon sakit untuk elak diri ke sek. Sekolah amat tak menyeronokkan untuk budak itu.</p> <p>I marah ms tgk vid tu... apesal la cg tu sengal xleh detect masalah bdk tu... tau nye nak marah je... tu mesti cg otai... Tp ye la kan... kt kelas tu ade eamail g bdk... so the teacher xleh nak tumpu kat die sorg</p> <p>Cikgu otai kan x kuasa nak melayan bdk yg mcm tu. Cg2 muda ni diorg suka melayan Based on cg2 muda kt sek i la Dah ingat nak pencek jek... Dah tak larat dah mungkin hahaha</p> <p>Ada ank kwn aku... he is in his own world... bdk ni thn 1... x pandai nak berkawan rakan sebaya... skrg ni die tgh obses ttg dinasour... segala vid kt utube ttg dino... die explore... rab tu x penah lps kt tgn... seegala mainan beekaitan ngan dino... die mesti nak... pening mak die Tu la silapnye... diorg x bwk jumpa pakar ... Ada member tu ..anak die mmg kompom disleksia... die bwk jumpa pakar kt hospital permai Bdk tu ckp omputih mmg 1st class... tp xde tumpuan... kelas yg die x suka... suka hati jek die kuar... round sekolah... mcm nazir</p> <p>R3: Gajet mmg kat tgn jek... kalau x... die bole ,engamuk Kitorg cikgu2 ni namapak ciri2 tu ada kt anak die... tp maknye sendiri xnak jumpa doktor... xleh teri, a kenyataan maybe 10years of marriage... br dpt anak... umur 40 br ngandung Sblm tu... die makan ubat mcm2 utk subur kan rahim</p> <p>R3: Bole efek kt anak ubat2 tu semua R3: Die mkn hormon utk peken</p>	<p>I was fuming mad when I watch the video... why is the teacher so stupid xdetect the student's problem... all he knows is scolding... that must be senior teacher... But yup... there are many students in the class... so the teacher xfocus on the kid alone</p> <p>Senior teacher don't have energy to entertain students like that. Young teachers do. Based on young teachers in my school. Think about retirement only maybe... helpless hahaha</p> <p>There's a friend's child... he is in his own world... this kid is in year 1... x know how to make friends with his peers... all in his you tube is about dino... he explores... the tab is always in his hand... every toy is about dino... he must want them... his mom is stressful. That was the mistake... they don't take him to see the specialist... There's another friend... her child is diagnosed as dyslexic... they took the child to psychiatry hospital. The child speak 1st class English... but no focus... if she doesn't like the class... she will go out as she wish... walk around the school... like school inspector.</p> <p>Gadget is always in her hand... if not... she will be tantrum We teachers saw this characteristic in her child... but the mother herself refuse to bring her child for diagnosis... x accept the fact maybe 10 years of marriage... only then they got a child... she got pregnant at the age of 40. Before that... she took all kinds of medication to strengthen the womb.</p>	<p>Commented [BAA19]: Associating seniority with behaviour</p> <p>Commented [BAA20]: Justify</p> <p>Commented [BAA21]: Justify the judgment</p> <p>Commented [BAA22]: Teachers highlight this earlier that they are demotivated with the education system hence the attitude.</p> <p>Commented [BAA23]: Contradiction with R3 earlier who claims that she learned about the concept. R3 is confused</p> <p>Commented [BAA24]: R3 perhaps has been holding this frustration even before watching this video. So her mind and emotion are fixed to this specific frustrating event.</p>

		The medication can affect the child. She took hormone pills to get pregnant.		Commented [BAA25]: Confident that the child's problem is related to medical/drugs/hormone pills side effects
R4	Sedih sbb msia jauh ketinggalan bab menyediakan facility yg sesuai utk murid2 khas Ibarat x dihargai Mmg ade tp x se gah mne sdgkan ada bukti yg dislex blh jd someone yg betul2 blh berjaya in life Kecewa jgk sbb ada cikgu yg ada hati nk bantu tp disebabkan kekangan dr mcm2 hal...so bdk2 yg special needs nie ketinggalan Sedih bile view dr pandangan murid dislex tu Diaorg bkn x mau berjaya tp mereka perlukan bimbingan yg betul utk maju...Not facility tp ape tu...guidance	Sad coz M'sia is left far behind in providing suitable facility for the special need students. As if they were not appreciated. Well there is but not good enough when there is evidence that shows dyslexics can be successful in life Frustrated also as there is teacher who wanted to help but because there are other hindrance... so these special needs children are left out. Sad to view from the dyslexic student's perspective. They wanted to succeed but they need the right guidance to excel... not any facility but what's that...guidance	- relate to V2	Commented [AA26]: Sad too but does not relate to self. Instead relate the system. Commented [AA27]: This is the strength of this video. It helps viewers see from the dyslexic's point of view and immersed in what it feels to be dyslexic. Hence, a lot of emotional reactions
R7	hai...(expression of frustration) saya ni mmg gagal mengatasi bdk2 ni...huhu marah aje la tau nye... Replied to interviewer's statement, "Cikgu penat kot dgn tugas yg luar biasa banyaknya. Sebab tu lah rasa kurang sabar dengan pelajar macam ni" ye la btul...dan setuju sgt...	hai...(expression of frustration like 'arghhh') I fail to overcome the children's problems...huhu (!) only know how to be angry... Replied to interviewer's statement, "teachers are tired with works. That's why (you) become impatient with those children" Yes...strongly agree...		Commented [AA28]: Supporting R3
R9				
R11	That Tom struggled so much in keeping up at school and with homework. He must hav been frustrated all the time Sadly, that happens in mlysn classrooms. And the blame is not on individuals solely. Many aspects in the whole system of education and socio-cultural contribute to that. Moved by Mr Teasewell's reactions and treatment to Tom, his response to concerns raised by Tom's mom. Tom's reactions to his struggles.			Commented [AA29]: Like R4. Associate it with the education system Commented [AA30]: Best to sum up the strengths of V1
R12	When the boy responded and acted after he was given a task by Mr Teasewell. The clip which shows the boy's struggling to understand and carry out the task given by his teacher. At the same time being criticised by his teacher, sibling and friends. Perplexed.			
	As the brain of a dyslexic works mysteriously.			Commented [AA31]: Perplexed

Reflection V1: Dyslexia Explained

	As the brain of a dyslexic works mysteriously.			Commented [AA31]: Perplexed
	Reflects: behaviour [explore]	Translation		
R2	helps me in knowing my students better. In recognizing who is having dyslexia problem. My child shows a few act similar to dyslexia but he seem to not having prob in reading.			Commented [AA32]: decision
R3				Commented [AA33]: Noticed the behaviour is similar to her child but identify that her child does not have problems with reading. R2 compares with V2. It's from V2 R2 knows about the core problem with reading
R4				
R7				
R9	It's not a disease and nothing to be afraid off. Why? Because it does not effect the intelligence of the kids in other way. Maybe he/she can't read and having difficulty in reading words and phrases but there are many ways we can do to help them. The most important we detect it earlier and help the children in solving it. Never put down ur children and never hurt their feeling if they still can't read. Remember that every children is different			Commented [AA34]: Emphasis/ confidence
				Commented [AA35]: Motivation lead to intention for action
				Commented [AA36]:
R11	Adakah lebih mudah mengenali dyslexic kids in 1st lang. classrooms than foreign lang.? Are there differences in the symptoms between first n foreign lang classrooms. Many of the symptoms can be found in my kids who are not only behind in english but struggled in bm as well. I've read somewhere that 1st lang skills hv effects on children's acquisition of 2nd language skills. In terms of english classrooms, it is rather difficult to identify what contributes to pupils' difficulties to read and comprehend. Some of the symptoms esp those involve reading and comprehension skills	Is it easier to identify dyslexic kids...		Commented [AA37]: Think aloud – compare 1 st and 2 nd language screening
				Commented [AA38]: Recall previous information
R12				Commented [AA39]: Decision made. 2 nd language is difficult

Reflection V1: Dyslexia Explained

	Implication: Ideas [integration]	Translation		
R2	Yes, I will find ways to teach them. I will either teach one to one or maybe in a smaller group like 6 to 8 persons in a group. R2: There should be a good approach or method in identifying the dyslexic and a special team to help them. R2: X semestinya masuk pendidikan khas. Cukuplah adakan kelas pemulihan khas yang sepenuh masa. Help them by motivating and building up the kids self-esteem.			Commented [BAA40]: Have started thinking strategy
		X necessarily sent to special need school. It is enough if there is a dedicated special need class.		Commented [BAA41]: Highlight on identification
R3				Commented [BAA42]: Confident to teach dyslexic in mainstream school
R4				Commented [AA43]:
R7	Guru perlu diberi pendedahan bagaimana cara @ kaedah pembelajaran khusus menangani murid dyslexia didalam kelas. Perlu wujudkan satu sistem pembelajaran khusus utk murid dyslexia kerana ada juga murid yg ada syptom dyslexia di sek saya yang sgt genius pemikirannya terutama bidang sains dn matematik... kalu diberi kursus dn taklimat khas...rasa semua guru bersedia...lebih senang utk hadapi murid2 ini didim kelas...tidak la saya terlalu mengikut emosi mrnghdapi murid2 ini... I: Dan lepas dilatih, ustazah bersedia tak mengajar students yg dyslexic ni dim kelas arus perdana? R7: saya rasa tak mampu utk mengajar student dyslexia...	Teachers need to be exposed @method of special education managing dyslexic in class. Need to create a special learning system for dyslexic student as there is student who has dyslexia symptom in my school whose thinking is really genius especially mathematics. If given a specific course and talk...I feel like all teachers should be ready... easier to face such students in class...so that I wouldn't be emotional when facing such students. I: After given some training, would you be ready to teach them? R7: I don't think I am capable to teach dyslexic		Commented [AA44]: strongly support her idea. That's why she is firm on this opinion before and after watching the artefact. Highlight Ts' focus on outcome, not process. * discuss this. Malaysian norms focus on quantitative results – numbers and percentage. Training for teachers. Willingness to learn.
				Commented [AA45]: Foresees the need to have specific education system. Note that R7 withdraw before other participants agree to watch V3. So R7's reflection is based on V1 and V2. V3 contains intervention – multisensory learning. R7 probably be more confident to teach if R7 knows that the intervention is not anything new. It was just multi approach.
				Commented [AA46]: Justifications for training. Teachers are angry because they do not understand the children's problem. If they are aware, they will be able to control their anger.
				Commented [BAA47]: R7 probably be more confident to teach if R7 knows that the intervention is not anything new. It was just multi approach that Ts need to consider based on learner's needs or needed learning aids, not merely as attractive teaching aids.
R9	The most important we detect it earlier and help the children in solving it. Never put down ur children and never hurt their feeling if they still can't read. Remember that every children is different			Commented [BAA48]: Aware on needs for identification
				Commented [BAA49]: Relate to emotion – refer to Mr Teasewell's behaviour.
R11	Teachers of different subjects should get together n discuss the case of any suspected dyslexic. A clear SOP should be developed so that the strategies to help the kids are done in an organised manner to get the desired outcomes.			Commented [BAA50]: Collaboration. Good for profiling
				Commented [BAA51]: SOP

	want to create learning environments that give every student equal chance to prosper. I want to be more positive ☺. I want to break out from the grips of perceptions that teacher's kpi is based on students being excellent in answering exam questions. It would be great if teachers, schools and the system can support those ☺			Commented [BAA52]: Move to motivation
				Commented [BAA53]: A teamwork.
R12	If I were given a chance to have a say in this area, I would recommend all teachers to attend a series of courses where they learn more about dyslexia, the symptoms, how to deal with the special children and actions to be carried out after discovering these children in school. Perhaps, the school administrators should also expose (in a fun and interactive way) various learning disabilities to the children and parents particularly during the PTA meetings or Children's Day just to raise awareness and hopefully they could help more people and community in the future.			Commented [BAA54]: More detail ideas on training
				Commented [BAA55]: This should be highlighted as Ts TPD campaign materials preference. Interactive like use of videos.
				Commented [BAA56]: Raise children and parents' awareness too
R15	yg ni lebih teratur...dr mula satu persatu penerangannya	More organised...step by step		Commented [BAA57]: Hopes for future – shows that R12 is motivated

	Implication: Action [resolution]	Translation		
R2	Kadang bukan kerana budak tu ada masalah menulis. But no one taught them HOW to write. Cikgu2 x ajar kemahiran penmanship. Anggap students mesti dah tahu sebab gi tadika. Ada budak bijak tapi cara menulis salah. Huruf ditulis dari bawah ke atas. Mcm f. Dari bawah naik ke atas lengkung sikit pastu buat garis. Yg b ditulis mcm no 6 cuma batang tegak. I did a research on this. Sedih bila tahu punca ialah penmanship x diajar. (*** R2 findings). Guru hanya lihat hasil kerja. Bukan macamana budak buat. Honestly I don't give much homework. Normally take home unfinished in-class task. But I give them words/phrases/sentences to be memorized for spelling and dictation. Project work with time frame	Sometimes not because the child has writing problem. But no one taught them HOW to write. Teachers don't teach penmanship skill. Assume the child has already know how as they went to kindergarten. There are smart student but write in wrong ways. They write from bottom to up. Like the letter f. from bottom they write upward and make a curve then draw a straight line. The b is written like number 6 just that the line is straight. I did a research on this. Sad when I know the reason is penmanship wasn't taught. Teachers only look at the		Commented [AA58]: Affirm her opinion on penmanship
				Commented [AA59]: Point out teachers' perceptions on year 1 students' writing skills
				Commented [AA60]: examples
				Commented [BAA61]: strongly support her idea. That's why she is firm on this opinion before and after watching the artefact. Highlight Ts' focus on outcome, not process. * discuss this. Malaysian norms focus on quantitative results – numbers and percentage.
				Commented [BAA62]: Less homework. Focus on assistive work in class

	Sy ingin pastikan setiap kanak2 diberi peluang bercerita tentang apa yg mereka mahu. A good way to know what they think about schooling. (refer to her experience teaching students who are a good story teller)	outcome. Not how the students do. I want to make sure that all children were given opportunities to talk about what they want.		
R3	(Response to a news on autism programme) Salam dear...Kanak2 autisme mmg golongan istimewa kan.... Aku nampak programni... terus teringat kt ko (Response to her friend's problem) R3: Aku try share vid ko ye... mane la tau terbuka hati die utk explore ttg anak die tu	Greetings dear... Autistic child are special right... I saw this programme (an advertisement of autism programme)... It reminds me of you. (Response to her friend's problem) I share your videos ok... who knows she would be more accepted to explore about her child		Commented [BAA63]: Encourage students to express their thoughts about their own learning orally/ Students' reflections
				Commented [BAA64]: Shows that the project affect R3 – was reminded
				Commented [BAA65]: Share information
R4				
R7				
R9				
R11				
R12				

Appendix K: Participants' Reflection on V2

V2 Reflections: Dyslexia a Hidden Disability

	Reflects: Emotion	Translation	
R1	Sbb yg ni pd aku touching sket secara personal... sbb dim tempoh aku mengajar, aku mgkn terlepas pandang or tak dpt bezakan samada budak tu slow atau ada prob dyslexic... maybe ms tu faktor xde pengalaman. Then kalau sbnrnya budak tu dyslexia... bukan ke mcm satu kesilapan cgu tu gak... sbb kalau dia dijaga betul, mgkn dia lebih bjaya skrg? Rasa mcm bersalah pun ada sbb mgkn aku gagal kesan plajar dislek ni... so label dia lemah... Pdhal mgkn dia ada potensi lebih yg mgkn aku tak nampak Mcm kes budak aku yg tulis bananana nanan tu la... aku ajar smpt thn 5 kot... mmg bi & bm dia lingkup... tp maths dia score A kat upsr. Dh habis politeknik pun skr	It touches me personally... because throughout my teaching years, I might have overlooked or couldn't differentiate between slow learner and dyslexic. Then, if the student is dyslexic... isn't it a teacher's fault... because if the student is taken care of, he or she might be a successful person now. I do feel guilty because if I failed to identify the dyslexic student... so label them as weak... when actually he or she have good potential which I might not have seen like the case with the student who wrote bananana nanan I told you earlier... I taught him until year 5... he fail English and Malay language... but score A for UPSR maths. He graduated from polytechnic already	<p>Commented [BAA1]: Personal</p> <p>Commented [BAA2]: Identify dyslexia</p> <p>Commented [BAA3]: guilty</p> <p>Commented [BAA4]: Seeing successful dyslexics in the video made R1 think about chances for dyslexic students to succeed that probably denied due to teacher's failure to identify the problem.</p> <p>Commented [BAA5]: guilty</p> <p>Commented [BAA6]: Personal experience that she had</p>
R2	Movies for motivation. Those short video clips for better understanding.		Commented [BAA7]: Better understanding
R4	Touching bile tgk video yg ade satu institusi tu yg try to bela this people	Touching when I see in this video that there is an institution that try to support this people	<p>Commented [BAA8]: Touch as well. Different touch from R1</p> <p>Commented [BAA9]: Weakness? Gives idea that dyslexics need special school</p>
R5			
R6			
R7			
R8	betapa kurang pendedahan dan ilmu juga kefahaman sy ttg dyslexia terkedu dan rasa belas kasihan Ya, bcos its like dyslexics are really struggling and ppl didnt realize their struggle Like in one of the video, the boy had to read aloud and he got scared It was like, i could be that teacher you know. Bcos i wasnt aware of him being dyslexic and all ☹️ [Grimacing Face] My gb has very little idea about autism And when i had to balik early sbb nk bawa my son to therapy or bila i came a bit late sbb my autistic (nonverbal mild ASD) son ada morning meltdown, she thinks i'm joking Exactly Dia ingat sy tipu Almost ALL cikgu thinks the same The sarcasm yg they said as if i'm guru malas or nk balik cpt etc So sbb tu i tend to be very critical bab nk implement whatever cadangan kak Basic things pun x settle and tu x mention org pdd lagi	I feel like how little is my exposure to and knowledge about dyslexia dumbfounded and sympathised.	<p>Commented [BAA11]: Feel lack of knowledge</p> <p>Commented [BAA10]: Refer to V1 – many respondents do this. They go back and forth from V1 to V3.</p>


V2 Reflections: Dyslexia a Hidden Disability

	<p>Tp part yg autisme etc tu org pppd kira bnyk lg empathy lah. But i dont share office with them so i dunno</p>	
R9		
R10	<p>Bg chance walaupun salah. Just nk instil keyakinan dia. Dia suka teramat walaupun kwn dia ejek. Setiap kali buat txtvt i suruh dia lead, nmpk dh keberanian dia.</p> <p>Mcm2 buat mmg target ke dia. Suruh baca pn dia bantai suka hati nk sebut apa, but i puji & bg present. Nmpk dia selalu seronok. Happy sbb dh ada perubahan ketara. Br 3 bln this year, dia dh pandai baca, bm & surprisingly, english! Now dia dh out of linus. Happy gila! Boleh tgk keletah dia dlm video yg i upload kt youtube</p> <p>Ahad tu ari icip cabar diri dia masuk pertandingan sajak...last year huruf pn x kenal Dr pemerhatian, icip mmg lmbt sgt dim pelajaran. From preschool lg. Lg 1, faktor guru sendiri mcm dlm video mr teasedwell. Dulu pn icip selalu ponteng sekolah. So, guru frust, murid pn frust. Now mesti icip tak miss school lagi</p> <p>R10: Yess! In fact kelas dia the only class yg capai 100% setiap bulan from January. Capai kpi kehadiran sekolah</p> <p>**Aida, tq sbb rasa mcm kebetulan pik i ada dim grup ni dgn situasi pd icip X peranan pn apa yg i buat dr awal thn ni dealing with dyslexia...mcm buat essay tanpa tajuk...now dh dpt tajuk 🙏Marah, 🙏bosan dan 🙏sedih krn sistem pendidikan Malaysia masih 'exam oriented' walau perubahan 'juta ringgit' cuba dilakukan, mungkin kekal begitu selama-lamanya. Hasilnya guru tdk dpt mendidik & membimbing murid ttp hanya mengajar utk lulus periksa. Ironi sekali dgn visi & misi kpm yg nampak ingin membentuk insan ttp hakikatnya pd akhirnya murid yg harus dibimbing dgn cara unik (penghidap disleksia) terus terabai dan dipandang sambil lewa. Mereka tdk dpt tunjukkn kepintaran mereka krn peluang hanya diberi kpd murid normal yg 'perform'.</p> <p>•Jd guru tdk berkesempatan langsung utk 'mengenal' anak murid & malah tdk sempat utk mencari2 kaedah/strategi terbaik utk membantu murid disleksia.</p>	<p>I gave chances to weak student like icip. Just to instil his confidence. When i do class activities, i will ask him to lead. I can see his braveness now. He is so happy even though his friend laugh at him.</p> <p>In 3 months he can already read in Malay language & surprisingly, english! Now he is out of linus. Really happy!</p> <p>Last year he can't even recognise letters.</p> <p>One more, teacher factor like mr teasedwell in V1. Previously, icip always skip from schools. So, teacher gets frustrated, the student gets frustrated too. Now he doesn't skip school anymore.</p> <p>Thanks because it feels like i'm fated to be in this group when i'm facing situation with icip. X realised that what i've been doing since early this year actually dealing with dyslexia... it's like i'm writing an essay without a title... now i have a title.</p> <p>🙏angry, 🙏bored dan 🙏sad because the Malaysian education system is still 'exam oriented' although they try to make changes that cost 'millions of ringgit', maybe it stays like that forever. In the end teachers can't nurture & facilitate students but teach them to pass examination. Ironically, the MoE's vision and mission seem to build human but in reality people who needs unique way of learning (like dyslexic) remain to be ignored and deal with less importance. They can't showcase their intelligence as chances were only given to 'normal' students.</p>

Commented [BAA12]: Move to V1

Commented [BAA13]: Policy vs implementation. Issue of transformational cpd – policy borrowed

V2 Reflections: Dyslexia a Hidden Disability

	<p>1. Sbb I dulu masa in primary & secondary school I was not a bright child. I flunk my english I x suka belajar, I x blh belajar bila cikgu ajarbkt depan I. Tp I blh pickup apa yg cikgu kelas sebelah ajar. I dengar & I dpt. I jns yg suka susun & organise things accordingly. I akan stress & anxiety. I x suka duit kertas dim wallet unorganise ikut warna</p> <p>Now I guru cemerlang English & a Canon (camera) partner photographer for national geography asean....I pn x fhm till now  [Laughing out loud]</p> <p>3. Yg x normal tu I rasa in terms of behaviour</p>	<p>So teachers don't get the opportunities to 'kwn' their students & in fact do not have time to find best method/ strategy to help dyslexics</p> <p>I was not a bright child in primary & secondary schools. I flunk my english I x like studying. I x learn when the teacher teaches in front. But I can pick up what the teacher next class was teaching. I listen & I understand. I like to put together & organise things accordingly. I'll be stress & anxiety. Now I am an excellent teacher (a name of a post) & Canon (camera) partner photographer for national geography asean....I x understand till now</p>	<p>Commented [BAA14]: Implication to teacher and student's bonding time</p>
R11			
R13			
R14			
R15	<p>yup..mmg ada effectla sbb bila berdepan bdk2 tahun 1 yg dh xde streaming skg ni mng kita dpt perhatikan msh2 pembelajaran dorg bg segelintirnya....lgla bila kita ada anak yg ada msh pembelajaran</p> <p>R15: skg ni masih usaha utk pulihkan hanis msh self-esteem dia..sbb diktr mng kata dia bkn oku.</p> <p>Interviewer: Do you agree she has self esteem problem, not oku?</p> <p>R15: agreed</p> <p>dia nk bt kerja sklh kat rmh atau belajar dgn cikgu2 yg pandai amik hati dia..kalau cg yg dia takut mng dia akan diam membatu cg bm tahun ni try pujuk sentuh dia, nmpk ada perubahan..last2 dia angkat tgn cuba bina ayat kat whiteboard</p> <p>[magnanya dia dh berani ke depan]</p> <p>skg upsr kat msia kena complete dipangcip PPSR..maknanya murid bukan ada akademik (upsr), pajsk (koku dgn koekademik, jwtn dim sklh) dgn ujian diagnotik pajsk dia A sbb ada sijil antarabangsa utk pengakap, permainan dia tekwando..catur..mmg Uma dah study prepare amik aktiviti2 yg beri markah tggj</p> <p>pajsk ni kena worksmart..bkn mesti pulun bersukan..yg penting pilih yg ada penyertaan tertinggi</p>	<p>Definitely it affects me because nowadays we don't do streaming so I can see some students have learning problem... especially when I myself have a child with learning difficulty. Now I am working on improving h*** self-esteem. Dr said she is not an OKU (disable).</p> <p>She wants to do homework and learn with teachers who care for her ... If she is scared with the teacher she will keep quite. I discussed with her teachers about her and her Malay language teacher try to confort her and touch her, this year I can see her changes... she begin to raise her hand and write sentence construction at the whiteboard meaning she is more confident now.</p> <p>Now in Malaysia student must complete PPSR ... meaning not only the students need to sit for UPSR (current national academic assessment) but also PAJSK (co-curricular with co-academic, posts in school) with her PAJSK diagnostic test score A because she has international certificate for scouts, she plays taekwando, chess... I prepare her for</p>	<p>Commented [BAA15]: No streaming for year one. Can identify those with learning problems. More emotional when you have a child with problem too</p> <p>Commented [BAA16]: See the potential</p>

V2 Reflections: Dyslexia a Hidden Disability

<p>benda ni baru lg..cg2 thn 6 yg fokus 4 subjek tu duk perlekeh bdk2 yg aktif koku, ko ekademi</p> <p>awal2 mmg dorg x hirau pun..tp bila dh nmpk kesan kat murid2 tahun ni...br la buka mata masing2...ramai cg x faham sistem cmne nk urus murid.</p> <p>jd dr linus Uma dh kena alih bg talk kat parent2 tahun 5, 6 tentang kesedaran bg anak aktiviti luar blk drjh</p> <p>yup sbb tu Uma join sekali kat mana dia ada...dia puteri islam..Uma yg akan handle kelas jahit puteri islam sebagai guru RBT..kat rumah sukan Uma ikut dia masuk rumah kuning, ajar kelas sejarah dia bt aktiviti yg sesuai sbb kls dia x blh membaca menyalin byk fakta</p> <p>R15: perasan kan mak dia..byk benda nk bt utk anak konon</p>	<p>activities with high scores. Need to work smart with PAJSK ... not necessarily involved in many sports ... what is most important is highest number of participation. This is new... the year 6 teachers who focus on 4 main subjects always look down on students who are active in co-curricular, co-academic. In the beginning they don't even care... but when they see the effects to students... then only they open their eyes... many teachers don't understand the system to manage students. So from LINUS, I now start giving talk to parents in year 5 and 6 on outside classroom activities awareness.</p>
--	--

Commented [BAA17]: Enthusiastic with pajsk – a new type of evaluation. Since this is a new intervention, many teachers look down on students who are active in co-curricular and non academic subject. Teacher like R15 who has a child with different traits is intrinsically motivated to learn more about opportunities for students with different traits. Watching V2 that featured successful dyslexic increased R15's inspiration.

Commented [BAA18]: Discuss – Malaysia has good intervention. Lots have happened to accommodate children for inclusive education. Unfortunately, the change agents have less awareness. Issue of PD – transformational. Important to recruit change agent – the teacher.

<p>R1</p> <p>Reflects: Cognitive</p> <p>betul mcm yg dlm video & kwn2 lain kat sini bgtau...bkn senang nk kesan plajar dislek ni.. contoh kalau kat pra sek or thn 1, kdg2 cgu tgg tulisan terbalik je diorg ckp...dislek kot...pdhal plajar dislek lebih dr sekadar tulisan terbalik. Diorg mgkn ada masalah membaca, tp mgkn cemerlang pd subjek lain.. mgkn juga subjek oral atau melibatkan something yg hands on.</p> <p>Sek kat msia ada kelas pemulihan, biasanya diorg akan dihantar kat situ... tp cemerlang plak pd subjek maths... kes ni asben aku selalu jumpa la</p>	<p>True like in V2 & friends here said... It's not easy to identify dyslexic student... example if at kindergarten or year 1, sometimes teachers see when students write reversed letters they said... maybe dyslexia... when actually dyslexia is more than writing reversed letters. They may have reading problem, but excel in other subjects... maybe oral or something hands on.</p> <p>There is remedial class in Malaysian school, normally they will be sent there... but good in Maths... cases like this, my husband always found.</p>
---	---

Commented [BAA20]: Difficult to identify. Chances to succeed.

V2 Reflections: Dyslexia a Hidden Disability

	<p>Even aku pernah jumpa..bila subjek bahasa tulis bananananana nanana je..tp maths bleh score A</p> <p>Kalau sapa yg ajar Bi dulu2, ms awal 2000 kot.. kita ada kaedah shared reading yg di adapt dr australia.. kaedah tu rasanya sesuai utk pelajar dislek sbb diorg decode setiap perkataan tu as a symbol.. budak lemah bleh baca... ada buku khas la yg diorg bg...tp lps tu kpm suh kita guna phonics plak.. Kaan.. tulisan buku tu pun besar2..</p> <p>Kaedah tu sgt sesuai rasanya ngn budak dislek tp utk overall..phonics still terbaik la..</p> <p>So, cgu xleh la guna same method of teaching utk semua pelajar</p>	<p>Even I have found... language subjects wrote bananananana nanan... but score A in Maths. Those who teach English last time, early 2000 maybe... we have a shared reading method adapted from Australia... that method I think is suitable for dyslexics because they decode each word as symbol... poor reader can read... there is special book they read... but then MoE ask us to use phonics... is it... the font in that book is also big</p> <p>I think that method is better for dyslexic but overall phonics is the best... So, teachers kuse the same method to teach everyone.</p>	<p>Commented [BAA21]: Decode using symbol? Dyslexics have problem translating (decode) symbols into sounds.</p> <p>Commented [BAA22]: Phonics help</p>
R2	<p>Video 2 may not be attractive but it can be an eye opener for the MoE in planning for better education to all children</p> <p>Video 2 helps me in knowing what I should do if there is a student with dyslexia in my class. LINUS2.0 is NOT the solution.</p> <p>I: Why do you think Linus is not the solution? What is wrong with linus?</p> <p>R2: Well, Linus is actually good but the terms and condition they put to execute it are ridiculous. Hence, instead of helping the kids to read...teachers are burdened with how to fill up the bppl gorm and so on. To make it worst...they set the kpi to achieve which makes linus looks like a test instead of just screening. If teachers can focus more on SCREENINGmaybe they can do something to help the kids. Even the time given is not appropriate. Just by looking at the date..yes..it looks like more than a month. March 1st till April 8th. But that is the same month for district and state level sports, one week school breaks, 1st summative test. I can say one of the busiest month for teachers. Teachers are looking for time to accomplish the screening and filling up the forms. The funniest thing is...there is no feedback on the screening itself and the items. Teachers are not allowed to share the reading or writing instruments. Even</p>		<p>Commented [BAA19]: R1 likes phonics but think shared reading with symbols is better for dyslexics. Different materials for different needs – is this correct? I think R1 misunderstood the decoding process and the decoding deficiency among dyslexic. (check)</p> <p>Commented [BAA23]: V2 promotes Westmark school as great school for dyslexic. Hence R2 viewed V2 as an eye-opener for MoE.</p> <p>Commented [BAA24]: Justification - time</p>

V2 Reflections: Dyslexia a Hidden Disability

	pupils don't know their errors or mistakes. We just have to key in the data	
R4		
R5	<p>R5: Ok, yg sama masalah R5 hadapi ttg dina. Sbb tu dh sampai habis sekolah rendah x refer pn ke pend.khas Akhirnya R5 cntct sendiri bhgn 3pk Pusat perkhidmatan pendidikan khas I cntct direct peg d kpm tanya n cerita masalah dina R5: Dia bkn x mo belajar tp dia x fhm apa perlu dia belajar or dia perlu tumpu Masa gi ke 3pk utk pe gesanan dina R5 jumpa guru2 dr sekolah lain.. Mrk kata...kebykn anak2 ni bkn x mo belajar Tp x fhm nape kena belajar dan apa yg di ajar. So dia x minat. Bila kt 3pk...pakar berkaitan bg dim bentuk mainan, nyanyi dll Utk kesan masalah diorg Masa tu R5 tengok sendiri...bdk2 seronok n bila tanya...nk dtg lagi x...ada yg kata nak dgn muka ceria Dina...dr psikologi...perkembangan dina sama mcm age 3-5 years old Dr gerak kerja sama.mcm 5thn sdgkn umur dina dh hampir 13thn Mglasa.kena epilepsy dulu ada saraf bhgn tu yg kena touch R5: Itu la...sian anak sendiri...tfikir anak2 murid Itu yg R5 tfikir sian anak2 murid ni...d marah pn dia x fhm</p> <p>Masih dim proses lg A**....next week kena gi lg utk detail kan lg psikologi tu...part.mana Pastu br refer dctr pulak Then br boleh kuar kn kad oku Hujung thn lepas. Lepas dpt result upsr. Sbb sbilm ni ayah dina mcm x caye. Sy guna result upsr.utk yakinkn ayah dina. Bila.dia senyap x bantah R5 nk teruskn...cepat2 R5 teruskn. Sblm dia halang interviewer: Berapa dina dapat? Bila dpt result yg pertama.tu...br ayah diam...looked like mila.percaya kekurng anak dia Dr segi perkembangan kesihatan...meng x de</p>	

Commented [BAA25]: Students love to learn when the approach is suitable. But R5 reflect westmark school as special need school.

V2 Reflections: Dyslexia a Hidden Disability

	<p>Tp kalau kt sekolah menengah...ada pihan utk mrk. Kalau perlu x.yah amek pmr...di ajar kemahiran spy diorg boleh survive esok</p> <p>Kalau nk amek pt3...pastu bolwh masuk kolej vokasional khas utk anak2 oku. Supaya kelak dia ada kemahiran...sijil or diploma utk.masa dp dia dlm bidang kerjaya</p> <p>Tu je yg boleh tlg diorg dlm bab ni</p>	
R6	Must understand that dyslexic students are smart. It depends on the teachers.	
R7		
R8	<p>No. I do shared reading bcos i'm teaching rural kids with no/minimum exposure to the language</p> <p>Hehe but we have to ask them to read aloud to us for LINUS screening. It's ok but the kids are labelled LINUS first before dyslexia. So to me its kinda degrading</p> <p>And unfair.</p> <p>Bcos even though they are dyslexic, they'll be called LINUS students. And in school, LINUS students are like slow learners, low-achievers among their friends.</p> <p>So with regards to this, if the aim is to identify problems i.e. spid, then the screening should be tailored to fit the aim. Hence the q's should be in mother tongue etc to lessen any possible interference(s) in the screening process.</p> <p>Tp bila mrk screen in english, its like mrk nk tahu s's mastery in the language, thus, questioning the validity of the LBI Instrument (read:questions) to detect any learning difficulties.</p> <p>I mean, to me, LBI (Linus b.inggeris) instruments tu tak valid utk tahu whether the students yg kita screen tu ada learning diff. or not. Huhu</p> <p>Interviewer: Brilliant ☺thinking. Mastery vs ability</p> <p>Betul. Tp this shouldnt be personal (reminding myself), jd i was thinking of nk kenal the students</p> <p>The less teaching time & bila ada sort of choices utk kids, they are bound to have favourites</p>	

Commented [BAA26]: Same like R1. But R8 has actually implemented. This shows that teachers do have the authority in classroom. They can decide which method they think is more appropriate for their class setting and their students but some teachers are afraid to go against MoE's instruction. MoE need to formally declare on teachers' rights to make decision on the best methods. Perhaps, MoE could introduce and train teachers with as many methods as possible. However, the authority to decide which method is best implemented should be given to headteachers and teachers who know their school's demography better. MoE could make a huge decision on general policy but not on methodology. The problem arise when MoE hold the decision on teaching methodology and assess the effectiveness of the methods by evaluating teachers and students' performance.

Commented [BAA27]: Argue on LINUS objectives

V2 Reflections: Dyslexia a Hidden Disability

	<p>Interviewer: we are so busy catching up the syllabus☺</p> <p>No. Catching up with govt's expectations Not syllabus. Tp exams. They say kita less exam oriented tp s's still kena assess, and gb's still stuck dgn nk bg reason why s's xlulus an exam yg TAK valid in the 1st place (think of linus student yg kena jawab soalan perdana) blabla</p>	
R9	<p>It's not a disease and nothing to be afraid off. Why? Because it does not effect the intelligence of the kids in other way. Maybe he/she can't read and having difficulty in reading words and phrases but there are many ways we can do to help them. The most important we detect it earlier and help the children in solving it. Never put down ur children and never hurt their feeling if they still can't read. Remember that every children is different</p>	
R10	<p>Yes, exactly! Bila tgk tulisan budak buruk, selalu I marah. Cara menulis x ikut cara yg betul. Rupanya I dpt tau drpd guru senior murid begitu ada masalah dialektika. So berkurun la I assume semua murid yg ada masalah menulis dgn cara yg betul tu lah yg ada disleksia. That's it, nothing else. [Correct me if im wrong.....autisme person nmpk jelas fizikal dia abnormal kan.....dyslexia ni luaran normal. Ada yg pd fizikal ciri2 dyslexia x alda?</p> <p>But then after I watched that video of course it hit me so bad that in reality theres many more symptoms of dyslexia!!! So I gain new knowledge now. In fact I think I pn ada disleksia as well</p> <p>►Pemahaman sy ttg penghidap disleksia selama ini hanyalah merujuk kpd masalah cara murid menulis. Sips tonton video tsbt persepsi sy berubah!</p> <p>►Mengajar di sekolah pedalaman yg muridnya tdk kurang drpd 10 org dlm 1 kelas memberi peluang kpd saya mengenali murid secara lebih dekat. Setiap murid adlh unik. Masalah berbeza, pendekatan jg berbeza. Mereka jg sy dapati belajar dgn cara yg unik. Sy pernah beranggapan bhw hampir kesemua murid sy ada masalah disleksia.</p>	<p>Commented [BAA28]: Behaviour – move to V1</p> <p>Commented [BAA29]: V3</p>

V2 Reflections: Dyslexia a Hidden Disability

	<p>►Video ini mengesahkan bhw tanggapan sy itu betul!!! Sy jg beranggapan bhw sy jg penghidap disleksia sbb cara sy menerima sesuatu ilmu bkn dgn cara konvensional & cara sy belajar jg berbeza.</p> <p>►Sketsa di mana sebenarnya bukan murid itu malas atau kurang pandai ttp hakikatnya cara belajarnya tdk sama dgn murid lain dan pendekatan yg guru gunakan tdk menjurus kpd ingin menyelami masalah pembelajaran murid supaya murid boleh mengikuti pelajaran.</p>		
R11			Commented [BAA30]: V3 – sketsa?
R13	<p>tak sangka ada mereka yg berjaya dikalangan dyslexic.</p> <p>Kenapa cikgu tak sangka? Apa yg cikgu sangka selama ini?</p> <p>R13: Mmg lah tak sangka...</p> <p>Sbb murid yg bermasalah biasanya x dapat mengikuti pdp spt rakan2 yg lain... Mereka lambat dan akan terus ketinggalan</p> <p>R13: Itu adalah realitinya</p> <p>R13: Tetapi bila dah dewasa mereka boleh capai kejayaan yg seperti itu... Itu bukan kejayaan lagi... Tapi itu dah satu anugerah</p>	<p>"I don't believe that there are actually successful dyslexics. Definitely can't believe it...that is not a success but a gift"</p> <p>"Learners with learning difficulties normally cannot follow teaching and learning like other children... they are slow and continuously left behind. That is reality"</p>	<p>Commented [BAA31]: Surprised to learn that there are dyslexics who are successful contradict to R9</p> <p>Commented [BAA32]: Reality in Malaysia</p>
R14	<p>Salam....baru tgk video tu....video yg menarik...</p> <p>kt m'sia xde kprkn mcm tu....klu de pun, Yg mnpti piawai x ramai.... Hnya sbgn kecil je....kbykn guru2 di m'sia rmai yg cnvrt dr pemulihan ke pen.khas....</p> <p>Guru2 hanya mmpu menilal.... Doktor yg mengesahkan.... Manakala, parent brhk wat kptusn smada nk bnrkn ank2 di pend.khas atau alim prdana....kt m'sia ade sek swasta yg mmpunyai kmhirm....tp mslhnya,byrnnya yg mhl.....</p> <p>Murid yg disleksia ni agk sukr nk dicam....brbndng yg autisme,sindrom down,slow learner....kt m'sia utk wat pngesanan murid itu disleksia itu.....rules nya mesti 8years...</p>	<p>Interesting video. In Malasia, we don't have such expertise. If we do, they don't meet the qualification... only a few and mostly convert from remedial teachers.</p> <p>In Malaysia, we do have private school with those facilities but expensive</p>	<p>Commented [BAA33]: Impressed</p>

V2 Reflections: Dyslexia a Hidden Disability

	Guru kt m'sia xde yg pkr.....yg masuk semua pend khas adalah umum pend.khas.....xde yg khusus.....kecuali utk pekak dan bisu....di sek nnti barulah mereka semua akan mgjr mengikut yg ditetapkan....	
R15	bkn tgk video tu je...tgh bc psl kes bdk india bunuh diri pun cuba baiki cara berdepan dgn murid...ada sikap2 kita yg menakutkan murid2	Some of our attitude scare the students

	Reasons: Strengths of the artefact	
R1	Lg pun video ke2 tu dia intvw org sbnr berbanding ditunjukkan dlm bentuk grafik mcm tu..haha Cartoon tu pun sbnrya on point dia punya penyampaian. Tp kalau tanya yg mana fav aku...yg lg satu la	In v2 they interview real people compared to graphic.. haha. The cartoon is actually on point but if you ask about preferences, I would say V2.
R2		
R4	R4: V2: papat yg berjaya tu sbb inspiring	V2 portrayed successful people. That's why it's very inspiring
R5	I prefer V2 Siap ada wakil dr kalangan tokoh yg jg dyslexia..lbh myakinkan org awam / guru yg zero pengetahuan ttg dyslexia ni. Jg pengalaman individu yg ada d keliling org dyselexia ni.	I prefer V2. They have representative from the successful dyslexics.. more convincing the general public and teachers who have zero knowledge of dyslexia. And also the experience of those around the dyslexics.
R6		
R7		
R8		
R9	Honestly, from the Hindi movie I understood about the people who have dyslexia. In the term to learn about dyslexia, video 1&2 you shared more clear and suitable to understand about this R9: From the Hindi movie I understood a few part of dyslexia but from the movie you shared I learn more R9: From the short video I learn about the concept. Because before this I'm not too clear about dyslexia, I'm always confuse it with autism. Even though in my school, we have 5 classes for special kids with problem in learning, their problems are different.	

Commented [BAA34]: Real people

Commented [BAA35]: Inspiring like R10

Commented [BAA36]: convincing

Commented [BAA37]: symptoms/ concept:

V2 Reflections: Dyslexia a Hidden Disability

R10	<p>This is a great video. Very moving & comprehensible. I think this one is more encouraging & effective when they relate to famous & distinguished people. For me, a good introduction to dyslexia awareness. It features distinguished people, popular such as Stephen Spielberg, Tom Cruise etc... Like the video bcoz I get the first hand knowledge & experience from the person who diagnosed having dyslexia. For me, I like most the 2nd video... I suka Hindustan & cartoon but I get more info from that particular video 😊</p> <p>6. Knowledge about dyslexia were well-presented in the video. 1st video didn't mention any famous people like 2nd video. So, people in dilemma whether is dyslexia something good or something else. Oblivious Yes...convincing. Tgk video ni br I jelas, mudah fhm & teruja nk explore more</p>		<p>Commented [BAA38]: Famous people</p> <p>Commented [BAA39]: Convincing as it portrays successful story</p>
R11	<p>The first is better for raising awareness. Good intro for teachers and parents to make them think deeper when faced with similar cases. The second video is definitely the next steps to check if it really is a case of dyslexia. I think the checklist would be more beneficial in school settings. So, as a teacher I would pick the checklist. The criteria is described explicitly and focuses more to learning process in the classrooms.</p> <p>I found the video a bit too long for an introduction. It shows many things at the same time; being dyslexics does not determine one's success or not in life...how it feels to be dyslexics...someone can have it for so long without realising it...suggestions for the problem...</p> <p>It's a little documentary-like too 😊</p> <p>If it is used in a course for a big group, the organiser needs to make sure that their sound system is good.</p> <p>It should be followed by a little discussion or reflection</p>	Inspired to explore more	<p>Commented [BAA40]: concepts</p> <p>Commented [BAA41]: Too long and too much information to digest. Contradict to R15</p> <p>Commented [BAA42]: Hence need to be followed by little discussion or reflection</p>
R13	<p>Setidaknya tuan badan sendiri mengakui akan keadaan itu...</p> <p>Klu hanya beri contoh tanpa bukti...</p> <p>Susah gak kita nak percayakan</p>	The dyslexics themselves admitted that they experience such situations. If we give example without any	<p>Commented [BAA43]: Real people</p>
R13:	<p>Sbg contoh saya baru pertama kali didedahkan dgn disleksia...</p> <p>Klu contoh yg diberikan mungkin boleh dipertikaikan sbg contohnya x disertakan dgn dalil yg sah 😊</p> <p>Hanya di sebut shj</p> <p>R13: Masa satu kursus dijalankan...</p> <p>Penceramah kata tom cruise salah seorg disleksia...</p> <p>Hanya disebut...</p> <p>Kita mcm percaya tapi dlm masa yg sama kurang percaya...</p> <p>Sbbnya kita bukan kawan tom cruise masa sekolah dulu 😊</p> <p>Seperti yg pernah saya maklumkan...</p> <p>Saya pernah mengikuti kursus pendidikan khas dimana didedahkan juga ttg disleksia...</p> <p>Jadi apabila tokoh2 tersebut bercerita saya dapat mengaitkan dgn apa yg pernah saya pelajari...</p> <p>Itulah sebabnya 😊</p>	evidence, it would be difficult to believe. There is one time, when I attended a course, one of the speaker said Tom cruise is dyslexic. We would like to believe but find it hard at the same time. Because Tom cruise is not our schoolmate 😊.	
R14			
R15			

	Implications: Motivation	
R1	<p>Aku diberi pilihan smlm sbb cgu baru dtg.. kelas mana yg aku nk lepaskan? Year 4 or year 1.. year 6 mmg jgn mimpi la..</p> <p>So aku pilih nk lpskan year 4 walaupun ajar year 1 tu sgt susah.. all in one class So sbb research ko ni aku truskan gak la ajar year 1 walaupun dh 4-5 thn x ajar..bleh gitu..kih3</p> <p>Sbb ada something yg menarik kat situ</p> <p>so aku kene truskan siasat la si had ni. Dia bleh bwk manik kecil sebijl. Isi dlm bekas plastik, bwk g sek. Then aku g mersing, dia bwk g mersing jgk smpl ptg. Manik biasa je. Sebijik. Aku tak tau dia pikir apa. fear of reading aloud.. ketara kat situ</p> <p>Ko pun tolong aku banyaaaak</p> <p>Aku pun mmg tgh fokus thn 1 ni</p>	<p>Commented [BAA44]: Motivated to find learn more about dyslexia</p> <p>Commented [BAA45]: Investigate her son</p>
R2	<p>I won't say that because I know about dyslexia long before watching that. But I can say it helped me in knowing better and deeper.</p> <p>Aware. Underwent a course on hyperactive students.</p> <p>**R2 Discover more about SpLD on her own because she is a mother of an SpLD child and underwent a course on ADHD</p>	<p>Commented [BAA46]: Not motivated</p>
R4		
R5	<p>Sblm ni ada fikir kesianrentetan kes dina...</p> <p>Tp since jumpa A** n bncg2 sikit tu..makin terasa tgjwb kena pikul...bntu anak2 yg lbh krg anak kita</p>	<p>Commented [BAA47]: Feel more responsible</p>
R6		
R7		
R8	<p>Interviewer: are you confident you can teach them?</p> <p>R8: No.</p> <p>R8: Sbb yg LINUS xde special needs pun nk tergolek ajar</p> <p>R8: Dan obviously mesti cikgu3 kena go to courses on dyslexia</p> <p>R8: Bkn sanggup or tak kak</p> <p>R8: Is this even possible</p>	
	<p>R8: Do you know the amount of admin work yg t's had to do yg obviously ganggu teaching & learning in class tp org kpm, jpn or ppd xpercaya dan ckp t's bnyk complain</p> <p>R8: Ini yg I also meant ttg the hindrance nk include dyslexic s's in perdana sch</p> <p>R8: Huhu aiyoooo</p> <p>R8: *perdana classes</p> <p>R8: Cikgu di perdana classes ni usually mmg nak tak nak - exam oriented</p> <p>R8: And yg devt milestones lmbt akan left behind</p> <p>Interviewer: Hence I buat research to understand how to deliver the message about students yg macam anak2 kita ni. Yg mild ni, org tak tahu</p> <p>R8: Teringat NCLB kat uk curriculum</p> <p>R8: Hehe</p> <p>R8: Msg smpai tp the pressure at school ttp ada, unless boleh tembus ke policy makers</p>	<p>Commented [BAA48]: Not motivated</p>
R9		
R10		
R11		
R13		
R14		
R15		

	Implications: Ideas - brainstorming	
R1	<p>sepatutnya kpm adakan satu kursus berfokus utk kesan & latih pelajar mcm ni. Bkn guru pemulihan or pend khas je</p> <p>Xleh baca je kita label dia lemah Mcm sekolah seni..sek sukan tu..or vokasional sekalipun..agak2 perlu perbanyakan tak? Ada kemungkinan tak pelajar disleksia ni bleh dihantar ke tempat mcm ni?</p> <p>Kalau pd sy sek vokasional mgkn...tp mcm sek seni ni ada yg fokus pd akademik jgk</p> <p>Sbb cth sek seni jb tu kluster...student kene fokus pd akademik sama byk ngn subjek seni Tp kalau vokasional rasanya perlu sgt. Sbb kdg2 kehebatan diorg bkn pd akademik..tp pd kemahiran</p> <p>Extra class tu mcm brangan bila kita start nmpk potensi diorang</p>	<p>Commented [BAA49]: MoE should train teachers to especially identify the problems</p> <p>Commented [BAA50]: vocational</p>
R2	<p>Vocational school is really important. My child needs school like that. (responding to R1 on dyslexics are not academic inclined but skills)</p> <p>Sometimes on academic too but only one subject that they like. Like science because there are lots of experiment. Or Maths. Fail all subjects or low marks except the one they like</p>	<p>"Sometimes on academic too but only one subject that they like. Like science because there are lots of experiment. Or Maths. Fail all subjects or low marks except the one they like" (** is this criteria of dyslexics?)</p> <p>Commented [BAA51]: vocational;</p>
R4		
R5		
R6		
R7	<p>Guru perlu diberi pendedahan bagaimana cara @ kaedah pembelajaran khusus menangani murid dyslexia didalam kelas.</p> <p>Perlu wujudkan satu sistem pembelajaran khusus utk murid dyslexia kerana ada juga murid yg ada syptom dyslexia di sek saya yang sgt genius pemikirannya terutama bidang sains dn matematik...</p> <p>kalu diberi kursus dn taklimat khas...rasa semua guru bersedia...lebih senang utk hadapi murid2 ini didlm</p>	<p>Awareness is important to help teachers to understand the students BUT not to prepare teachers for teaching</p>
	<p>kelas...tidak la kr** terlalu mengikut emosi mrnghdapi murid2 ini...</p> <p>I: Kalau diberi latihan, ustazah berminat tak nak turut serta? Dan lepas dilatih, ustazah bersedia tak mengajar students yg dyslexic ni dim kelas arus perdana?</p> <p>R7: saya rasa tak mampu utk mengajar student dyslexia..</p>	
R8	<p>buat satu banner ttg cara mengenali dyslexia di sekolah, memberi guru pemulihan/pendidikn khas utk membuat early screenings utk dyslexic child at school</p> <p>(***agree on identification but send them to SEN) R8: Sbb t's are subject specialist</p> <p>R8: jd bnyk benda yg akan bertindan. Some kids like cikgu A so lain laporannya, some suka cikgu B, Iso lain jugak laporannya</p> <p>R8: I studied in the uk dan i also was a student in a uk school masa ikut my dad blaja. Di uk, i had one cikgu and a tcher assistant. Bila balik msia i hated school sbb cikgu bertukar hourly</p> <p>Interviewer: tell me about it</p> <p>R8: Dan bila gitu, i tend to buat teruk in one t's class all the time and ace in another t's class</p> <p>R8: So klu i am the teachers</p> <p>R8: There are bound to be different laporan kan. In tcher A i will do everything (hence mungkin if i'm dyslexic, i'll try to adjust) but in tcher B, i'll drift away</p> <p>R8: Sbb i also read yg dyslexic s's can actually adapt to 'normal-style' learning system</p> <p>R8: Hehe</p> <p>R8: But</p> <p>R8: If only one tcher in the class yg mmg is with me the whole tim</p> <p>R8: *time</p> <p>R8: The report would definitely be different than these</p>	<p>Commented [BAA52]: awareness campaign</p> <p>Commented [BAA53]: pointed out the challenge in producing screening report. _this should be discuss in detail</p> <p>Commented [BAA54]: screening</p>
R9	<p>The most important we detect it earlier and help the children in solving it. Never put down ur children and never hurt their feeling if they still can't read. Remember that every children is different</p>	
R10	<p>Ni patut guru guna me atas semua murid, bukan linus je (Primary School Dyslexia Checklist by The Dyslexia Association www.dyslexia.uk.net *** R11 favourite)</p>	

	Implications: Action		
R1	<p>Aku dh tukar guna byk worksheets skrg sbb bukan dia je ada prob menyalin. Kat umah mmg kitorg bg worksheets je. Anak aku slow.. menulis ni hmpir taknak langsung.. pegang pensil pun mcm apa je aku tgg. Ni memula bapak dia x percaya tulisan dia. Membaca mmg slow. Skrg ni tgh train. Bl dia paham, tp lum bleh baca.</p> <p>Aku kene start balik ngn phonics.. Since dia susah nk salin dr whiteboard.. aku tulis lg kat kertas letak atas meja</p> <p>Isra Ayu: Parking jap</p> <p>http://www.gpsbestari.com/mobile/artikel/rencana/ibu-bapa-dan-guru-yang-ada-anak-disleksia-wajib-baca-ni-1.552245</p> <p>I: #IsraYu dapat dari mana? Ada org bg link ke?</p> <p>R1: Fb..ada org share</p> <p>Isra Ayu: Aku tepek sini sbb x sempat baca..takut hilang..so letak sini dulu..☺</p>	<p>http://www.gpsbestari.com/mobile/artikel/rencana/ibu-bapa-dan-guru-yang-ada-anak-disleksia-wajib-baca-ni-1.552245</p> <p>(****PDM wrote- teachers navigate other articles that support their ideas that dyslexics need to be sent to special school - another challenge of the ease in digital info)</p>	Commented [BAA55]: provide more worksheet
R2	<p>This year I teach a dyslexic and a hyperactive students. There are 3 year students. The hyperactive is smart. But need to apply kinaesthetic T&L. The dyslexic is different. He is just shy to try because he always been laughed during kindergarten. Like the hindi movie. But the other one, I don't think he is dyslexic. He is ok but he wrote reverse letter. Maybe he has eyes problems like my nephew. The kid is smart. Can do language arts but not reading and writing. He is scared of reading. He fails written test but a good story teller. Good in reciting poems too He can't memorise things even if you give him a month Shows</p>		Commented [BAA56]: move to V3
	that the kids have good ability in memorizing not reading.		Commented [BAA57]:
R4			
R5	<p>Betul tu A**..RS skrg meng minta kelas hujung2 kt pentadbir...mila2 meng kita x tahan dgn sikap anak2 ni...tp bila kita kenal dia...kita x kan samoal hati nk marah. Malah mrk akn jd kn kita tpt utk bcerita...meng sedih dgr cerita dr hati mrk...psi cikgi...psi mak ayah yg selalu marah2...x fhm mrk</p> <p>RS: Alhamdulillah..semiga usaha kita yg sedikit ini dpt memberi kesan yg baik utk anak2 bermasalah fai termasuk anak2 kita. Semoga Allah permudahkan jg utk kehidupan anak2 kita</p>		Commented [BAA58]: ask to teach weak students
R6			
R7			
R8			
R9			
R10	<p>Now after I recounter all teacher & asked them to be more responsible & patient to him, he started to show his effort in every aspect!</p> <p>In my case, i've already produce 10+ videos but the rest still in editing. Everyday this particular Y3 class, always eager waiting for me & keep looking for me. So I was thinking, there must be something triggered them acted like that. Rupa nya dorang suka masuj video. I pn Itk tripod & fake camera permanently dlm kelas dorang. Nmpk dorang happy everyday.</p> <p>....but then they still keep looking for me....is it because of the video or me?</p>		<p>Commented [BAA59]: make arrangements with other teachers.</p> <p>Commented [BAA60]: Do more videos</p>

Appendix L : Participants' Reflection on V3

V3 Reflections: Tare Zaman Parr

	Reflections: Emotions	Translation	Notes
R2	Movies for motivation. Those short video clips for better understanding. Movie tu byk rencahnya termasuk kasih seorang ibu. Marah seorang ayah. Of course the videos. Lebih byk info and straight to what they need to know. If you are looking for something to motivate the teachers on how to see from different angles about slow learners in school, I would suggest that hindi movie.	There are lots of flavours in the movie including love of a mother. Anger of a father.	Commented [AA1]: Motivation. This is a thesis statement! Commented [AA2]: Too much added messages (flavour)! -R2 saw this as a disadvantage - too many to digest for a better understanding about dyslexia Commented [AA3]: Different perspective
R4	Yg nie yg sedih tu Mmg ade in real life...mostly Lbh2 lg yg jenis out spoken...i knew someone yg mcm tu I: U mean yg macam cikgu gemuk tu? R4: Haah...bt judgement w/o siasat whats wrong Actually...i was like that b4... 1st yr of my teaching practice Rse rimas...nk mrh seme ade Interviewer: Tp kan... aamir khan dia sendiri dyslexic. Don't you think that is the reason why dia faham budak tu. Yg ckgu lain xaware R4: sy ade anak...hihihihi R4: Yup... Interviewer: Rimas apa? R4: Thats y die bt movie tu R4: Yelah...kite ajar berpuluh kali x paham2 R4: Pastu melilau dim kelas R4: Aish...mengundang mrh dihati Interviewer: Oo... in real life aamir khan tu dyslexia eh R4: Yup. Akk x tau ek? R4: Kikikiki	This is sad. It happened in real life... mostly Especially the outspoken type...I knew someone like that I: U mean the fat teacher? R4: Yes...making judgement without investigating whats wrong Actually...i was like that b4... 1st yr of my teaching practice Feel uncomfortable...angry and all I: But...Aamir khan is a dyslexic. Don't you think that is the reason why understood the child. Other teachers are not aware R4: Before I have children...hihihi Yup I: Uncomfortable? R4: That's y he made that movie Well...we teach many times and still they don't get it. Then walking here and there in class. Aish (pfft)...made me angry.	**verify characteristics of dyslexics: Naughty, lazy, trouble-maker? Commented [AA4]: Sad. Addressing 'outspoken people'. Others' perceptions on dyslexics. Reflecting real life experience. Commented [AA5]: Reflecting self. Being novice teacher. Emoticon (sad face) Commented [AA6]: Being a mother helps R4 to understand children better. Commented [AA7]: Note - I don't know the actor is a dyslexic himself. I'm referring the actor being a dyslexic in the movie. Commented [AA8]: R4 highlights the actor as dyslexic Commented [AA9]: Previously, R4 said she feels uncomfortable with her students. Why? When students don't understand what she taught after repeating several times and the students are restless (walking here and there in class)
R8			
R9			
R12	Hahahah Working with y1 kak Hahahaha 33 and ramai boys Gtulahh Last year I taught them But actually bila dh slalu jd routine... I mean dh train dr awal thn Kita akan get used to simple instructions...short sentence of course haha...pastu models...buat actions sama2...and ulang satu kelas the steps...haha Sgt jarang bdk2 tny blk Sbb kwn2 dia akn ingatkan... And they use Eng	Hahahah Working with y1 sister Hahahaha 33 and many boys That's why Last year I taught them But actually when it become routine... I mean I've trained time from beginning we'll get used to simple instructions...short sentence of course haha...then role modelling... act together...and repeat the whole class the steps...haha Rarely they asked again because their friends will remind... And they use Eng	Commented [AA10]: Remind R12 of her students who are majority boys. 33 in a class. Commented [AA11]: Found solutions - simple instructions, short sentences, doing things together, repetition. Commented [AA12]: Found solutions - simple instructions, short sentences, doing things together, repetition.

1

V3 Reflections: Tare Zaman Parr

	Reflections: Cognitive	Translation	Notes
R2	<p>I learned a lot. Not all slow learners are dyslexia.</p> <p>Although they look smart but they have difficulties in READING. Baru tahu how stressful it is for them to read.</p> <p>I have received a checklist. It was during a course on hyperactive students. But there are also criteria of dyslexia like always giving excuse. Don't like writing (because they need to read in order to write).</p> <p>R2: Yup. After watching that movie, I learned a lot. Not all slow learners are dyslexia.</p>		<p>* Do teachers who don't have background knowledge react the same? Some participants don't know this. Instead, they asked for checklist for dyslexia symptoms.</p>
R4	<p>I: In that movie... you admired aamir khan as teacher who willing to go beyond compared to cikgu lain2.</p> <p>Does it fair for us to say other teachers not kind?</p> <p>R4: Nope sy rse</p> <p>Bkn sbb diaorg x kind tp actually diaorg x tau</p> <p>Interviewer: Do you think cikgu Malaysia pun macam tu?</p> <p>R4: Rsenye if diaorg tahu...as a teacher mesti ada sket empathy</p> <p>R4: Lets say like this...teachers also a human being...</p> <p>Ade yg will touched if kenal dan try to understand the dislex people</p> <p>R4: But...cannot deny also some of them will pandang senget to dislex people ni</p> <p>R4: Saying that why x anta ke sk.khas aje</p> <p>Nyusahkan je dok kt sk ni...bla...bla...bla</p> <p>Its a burden for some teachers la</p> <p>But thats my opinions kak...maybe ade yg disagree</p> <p>Interviewer: Burden camne tu?</p> <p>R4: Dislex pupils in main stream sch.</p> <p>Cikgu nk laju...kejar syllabus</p> <p>Tp ade penghalang</p> <p>Then keputusan kelas jd x cun</p> <p>Sbb ade failure hihihih</p> <p>R4: Bru n baca yg senator pompuan yg bw anak die mse Die ckp...how can i compared u to teachers who had taught u to be like this?</p> <p>Kisahny...doctor kt sane komplek why gaji cikgu lg besar than diaorg yg kje doc</p> <p>They saved lives they said</p> <p>R4: Sorry...than</p>	<p>..compared to other teachers</p> <p>R4: Nope I don't think so. Not because they are not kind but actually they x know.</p> <p>Interviewer: Do you think Malaysian teachers are like that?</p> <p>R4: If they knew...as a teacher they must have some empathy</p> <p>R4: Lets say like this...teachers also a human being...</p> <p>Some will be touched if knew and try to understand the dislex people</p> <p>R4: But...cannot deny also some of them will look down on dyslexics.</p> <p>R4: Saying that why x send to SEN school. Such a troublesome in this school...bla...bla...bla</p> <p>Its a burden for some teachers la</p> <p>But thats my opinions sister...some may disagree</p> <p>Interviewer: Burden how's that?</p> <p>R4: Dislex pupils in main stream sch. Teachers need to catch up with syllabus but there is a hurdle.</p> <p>Then the exam result is not pretty because there is failure hihih</p> <p>R4: I've just read about a senator she said...how can i compared u to teachers who had taught u to be like this? The doctors there complain why teachers' salary is bigger than the doctors.</p> <p>They saved lives they said</p>	<p>Commented [AA13]: R2 has background knowledge, hence can relate with the movie.</p> <p>Commented [AA14]: Teachers being unkind because they don't know.</p> <p>Commented [AA15]: Natural instinct</p> <p>Commented [AA18]: Natural instinct</p> <p>* Salary = teaching loads</p> <p>Commented [AA16]: Some may dislike dyslexics and regard them as burden: slow down the lesson, bad academic performance (refer to Malaysian high-stake exam system)</p>

2

V3 Reflections: Tare Zaman Parr

	Kt cni...cikgu mintak naik gaji...netizen mengumpat mcm2 Dapat naik gaji 3% je setahun Kikiki	R4: Sorry...than Here...if teachers ask for salary rise...netizen will badmouth. Get 3% increment a year...kikiki		Commented [AA17]: Teaching profession as first class profession in other country vs third class profession in Malaysia – salary issue
R8				
R9				
R12	How people with dyslexia think and handle their emotions when dealing with problems or when struggling in schools. Teachers should Experiment...exploring possibilities or ways to comprehend and help the kid			Commented [AA19]: What occurs in the mind of a dyslexic catch R12 interest.
	Pd sy... in reality dgn Ss yg ramai akan susah or akn dtg rs byk lagi perkara penting...so to kill two birds with one hand I would try the approach with all Ss hahahah It's definitely going to be extra fun Hahhaa playing with them Plus dpt tlg the dyslexic if any in the class	To me...in reality with many students it will be difficult and feel like many other important things to do...so	* This is exactly what teachers in Malaysia should do. The education system & teaching approach & testing need remediation NOT the dyslexics. Q: How to make Ts aware? R12 is the sample of the aim of this study. How does R12 view this issue?	Commented [AA20]: Big class size reality in Malaysian school Commented [AA21]: Solution – try the approach to all.
	Interviewer: You said "In reality dgn Ss yg ramai akan susah or akn dtg rs byk lagi perkara penting" ... apa tg lebih penting tu? R12: Hahahahaha...prog sek...clerical work hahahaha Realistic.dgn full force dr pemantauan jpn and ppd Itvwr: Do JPN and PPD make sure you all do the multisensory approach? R12: I would say intrinsically encouraged sbb kalau x dtg dr diri susah nk carry out any approach pun Hmmm x jugak but they want to see it when they observe Itvwr: So maknanya it has not been emphasised by the JPN and PPD lah? R12: Implementing and putting the type of approach in our lesson plan nicely agak berbeza...maksudnya we can write it dim lesson plan tp do we really do that Huhu Itvwr: Aha... R12: Hoho I wouldn't say much about this hahaha...it's just that the will power to carry out and implement tu...kalau dtg dgn paksaan susah nk smpai ke student tu ka! Intvwr: And were teachers trained with multisensory approach? R12: As far as I'm concerned...nope...maybe pre school ye Intvwr: Do you think primary school teachers need it too? R12: Yes esp the lower level teachers...tp it would be great if all teachers are exposed and trained	I: You said "in reality with many students it will be difficult and feel like many other important things to do" ... what is it? R12: Hahahahaha...school programme... R12: I would say intrinsically encouraged because if x come from oneself difficult to carry out any approach Not really but... R12: Implementing and putting the type of approach in our lesson plan nicely is different...meaning we can write it in lesson plan but do we really do that R12: Hoho I wouldn't say much about this hahaha...it's just that the will power to carry out and implement...if was forced will not reach the students sister	* How to motivate other Ts intrinsically?	Commented [AA22]: A teacher's motivation vs workloads setbacks Commented [AA23]: R12 is intrinsically motivated. Commented [AA24]: Will power is important to ensure that students received the benefits
			* several other teachers (R4,	Commented [AA25]: Multisensory approach is highlighted in this movie

V3 Reflections: Tare Zaman Parr

			R13 & R14) also expressed their respects and adore Amir Khan's effort to teach the boy (the teacher in hindi movie). But they don't realise that that is the changes Malaysian teachers need to do.
R13	<p>R13: Smpi skrg saya masih ingat cara guru tersebut membantu murid itu</p> <p>R13: Bila kita ada kaedah dan pendekatan yg betul tuk bantu golongan ini...</p> <p>X mustahil mereka akan lebih berjaya drpd kita</p> <p>Yg ptg kita dapat membantu anak2 murid kita dlm pelajaran utk bekalan masa hadapan mereka</p> <p>Interviewer: Cikgu ada pengetahuan. Mungkinkah cikgu rasa Cikgu teruja sebab cikgu tahu cikgu boleh bantu</p> <p>R13: Yap...</p> <p>Sbb saya tahu sedikit ilmu disleksia itu</p>	<p>R13: Till now I can still remember how the teacher help the kid. When we have the right method and approach to help this people...</p> <p>X impossible they can be more successful than us. Most importantly we can help our students in their education for their future.</p> <p>I: You have knowledge. Could that be the reason why you feel excited to help</p> <p>R13: Yup...cos I have some knowledge about dyslexia</p>	<p>* R13 is a remedial teacher who has some exposure to teaching dyslexia.</p> <p>R12 doesn't have exposure but strong will power.</p> <p>R4 is motivated but stranded with her dilemma.</p> <p>R14 has some exposure. His wife works with dyslexic.</p>
R14	Dia lebih mencerminkan ketabahan seorg guru utk didik anak muridnya yg istimewa... Pibagai cara digunakan spy ank didiknya jdi manusia yg normal di mata masyarakat	It featured a teachers' determination to nurture his special need student...Many approaches utilised so that his student become normal in the eyes of the society.	<p>* see above (R12) comment</p> <p>* To make the student normal in the eyes of the society? Remediation but not cured?</p>
R15			

Commented [AA26]: Motivation to support dyslexics. Same comment on multisensory approach

Commented [AA27]: Multisensory approach. But R14 mention "normal"

V3 Reflections: Tare Zaman Parr

			R13 & R14) also expressed their respects and adore Amir Khan's effort to teach the boy (the teacher in hindi movie). But they don't realise that that is the changes Malaysian teachers need to do.
R13	<p>R13: Smpi skrg saya masih ingat cara guru tersebut membantu murid itu</p> <p>R13: Bila kita ada kaedah dan pendekatan yg betul tuk bantu golongan ini...</p> <p>X mustahil mereka akan lebih berjaya drpd kita</p> <p>Yg ptg kita dapat membantu anak2 murid kita dlm pelajaran utk bekalan masa hadapan mereka</p> <p>Interviewer: Cikgu ada pengetahuan. Mungkinkah cikgu rasa Cikgu teruja sebab cikgu tahu cikgu boleh bantu</p> <p>R13: Yap...</p> <p>Sbb saya tahu sedikit ilmu disleksia itu</p>	<p>R13: Till now I can still remember how the teacher help the kid. When we have the right method and approach to help this people... X impossible they can be more successful than us. Most importantly we can help our students in their education for their future.</p> <p>I: You have knowledge. Could that be the reason why you feel excited to help</p> <p>R13: Yup...cos I have some knowledge about dyslexia</p>	<p>* R13 is a remedial teacher who has some exposure to teaching dyslexia.</p> <p>R12 doesn't have exposure but strong will power.</p> <p>R4 is motivated but stranded with her dilemma.</p> <p>R14 has some exposure. His wife works with dyslexic.</p>
R14	<p>Dia lebih mencerminkan ketabahan seorg guru utk didik anak muridnya yg istimewa... Pibagal cara digunakan spy ank didiknya jdi manusia yg normal di mata masyarakat</p>	<p>It featured a teachers' determination to nurture his special need student... Many approaches utilised so that his student become normal in the eyes of the society.</p>	<p>* see above (R12) comment</p> <p>* To make the student normal in the eyes of the society? Remediation but not cured?</p>
R15			

Commented [AA26]: Motivation to support dyslexics. Same comment on multisensory approach

Commented [AA27]: Multisensory approach. But R14 mention 'normal'

V3 Reflections: Tare Zaman Parr

<p>R13: Paling terbaik adalah gabungan kedua2nya R13: Ye...</p> <p>Bago saya simulasi itu lebih memahami saya Interviewer: Anantara: 1. interview tu disertakan simulasi... 2. Movie disertakan interview dgn real people yg dyslexic pada akhir cerita...</p> <p>Mana satu lebih best? R13: No2</p> <p>R13: Klu movie... Bahasa yg digunakan mestilah bahasa yg difahami... Klu saya mestilah bahasa melayu R13: Klu org jepun... Klu guna melayu mcm kita tengok hindustan... Paham grafik tapi x faham bahasa... Nasib baik ada senikata melayu kat bawah nyai Faktor paling utama menarik minat...1. Jalan cerita menarik. 2. Sinematografi yg menarik. 3. Pelakon yg menarik</p> <p>R13: Sbb dim cerita hindustan ni... Situasinya sangat dekat dengan kita... Mainan emosi cikgu Interviewer: cuba cerita sikit emosi cikgu tu Interviewer: sedih? marah? suka? R13: Marah... Bila murid tersebut di pukul, dimarah dan dihina oleh guru ... Dipinggirkan oleh keluarga</p> <p>Sedih... Melihat sikap guru yg hanya x mahu memahami masalah anak muridnya... Bapa yg tidak mengambil berat ttg anaknya</p> <p>Suka... Murid itu berjaya setelah mendapat kejayaan dgn bimbingan guru yg perihatin penyayang dan kreatif dim pdpnya Interviewer: Boleh cikgu jelaskan apa yg cikgu maksudkan dgn "Situasinya sangat dekat dengan kita..." Interviewer: apa yg berlaku di sekeliling cikgu tu sama ke? R13: 1. Sbb klu kita tengok tv... Kita dapat hayati semua watak yg dimainkan oleh pelakon tersebut... Itu yg buat dekatnya</p> <p>2. Sbg seorang guru... Cerita pun ttg guru...</p>	<p>To me the simulation made me understand better. I: Between 1. Interview plus simulation 2. Movie plus interview with real people Which one is better?</p> <p>R13: Number 2</p> <p>R13: For movie.. the language used should be easily understood. Like me definitely malay language R13: A Japanese watching malay movie will be like us watching hindi...understand the graphic but x language...luckily there is subtitles Main factor is interesting...1. Great storyline, 2. Interesting Cinematography. 3. Interesting actors.</p> <p>R13: The movie's situation is very closed to us...emotional game</p> <p>R13: Angry...when the students were smacked, scolded and belittled by teachers...abandoned by family</p> <p>Sad... watching teachers' attitude who x want to understand the students...Irresponsible father</p> <p>Happy...when the students succeed after getting right support from good teachers who are caring loving and creative in teaching</p> <p>When we watch it we can feel the character</p>	<p>meaning is delivered. Suggestion is given.</p>
--	--	---

Commented [AA50]: Pre-requisite: language must be understood. Subtitle needed.

Commented [AA51]: 3 important factors

Commented [AA52]: Emotional encounter

Commented [AA53]: How viewers feel the situation.

V3 Reflections: Tare Zaman Parr

<p>Jadi mmlh hanya dekat dengan kita... Betulkan ckgu Interviewer: Dekat hanya kerana ia kisah guru dan murid? Interviewer: atau dekat kerana ckgu alami situasi atau saksi situasi sama? R13: Yap... 1. Kisah guru 2. Sbb saya mempunyai murid yg lemah Interviewer: apa yg ckgu buat utk bantu murid ckgu yg lemah? R13: Sbb kita tau mereka lemah... Jadi pdp kita kena bersesuaian dgn tahap mereka... Alat bantu mengajar maulud dan ict perlu menarik minat murid Interviewer: ABM perlu menarik minat? R13: Maksudnya... masalah pelajar yg lemah ni ialah sebab tak minat belajar? jd kena tarik minat mereka? Interviewer: ada tak yg dah minat belajar tapi masih tak pandai? R13: Ada ckgu... Sbb pelbagai faktor... Antaranya lahir pra matang... Kekurangan makanan yg berkhasiat... Faktor daya taakul yg lemah dsb R13: Klu lakonan... Kita spt berada kat atas... Kita nampak semua kat bawah... Dalam satu bab kita boleh terus dapat impak positif dan negatif Interviewer: Lakonan panjang? R13: X kira ckgu... Panjang atau pendek... Bagi saya klu utk kenalkan disleksia 5 minit pun sudah memadai tuk kita kenalkan apa itu disleksia Interviewer: Baik... R13: Cerita lain ckgu... Ada bunga cantik Ada wanita cantik Ada lelaki hensem... Tambah2 lagi lagi love2 Interviewer: ... Interviewer: Ada respondent yg suka yg pendek. Movie byk sgt mesej yg lain2 katanya. Tp masing2 punya minat lah kan? R13: Betul3 R13: Movie lebih kpd komersel</p>	<p>1. it's a story about a teacher 2. because I have weak students Because they are weak, we need to help them. T&L should accommodate their skills I: Teaching aids need to be attractive? R13: Meaning... the problem with weak student is lack of study interest? so need to attract their interest? I: Is there student who are interested but still weak? R13: There is... Many factors like born pre-mature Innutritious food Weak analytical thinking ability R13: Watching an act We are like viewing from above We can everything below us In one shot we can see the positive and negative impact R13: Doesn't matter long or short ... to me to know about dyslexia 5 minutes is enough. R13: Story is different... There are beautiful flowers Beautiful ladies Handsome man especially about love R13: Movie is more of commercial value</p>	<p>Feel the character. A story about a teacher watched by a teacher * Weak student is less interested to learn? Hence, use teaching tools to attract their interest.</p>	<p>Commented [AA54]: As remedial teacher, R13 can relate with the actor. Know why teacher should teach according to the students' ability (refer to lower syllabus taught to LINUS students which other teachers disagree)</p> <p>Commented [AA55]: Weak student less interest to study?</p> <p>Commented [AA56]: Factors for low achievement</p> <p>Commented [AA57]: We may need just 5 minutes to introduce what is dyslexia. But movies are different. Movies motivates (support others' opinion too. This could be the strength of V3).</p> <p>Commented [AA58]: Commercial values</p>
---	---	---	--

V3 Reflections: Tare Zaman Parr

R14	Memg filem amir khan tu yg trbaik utk dijadikan pilihan...lgpun, la mgmbrkan prkara realiti yg blaku pd ank2 di dunia ni... I: So you are motivated? R14: Yeeeeessss	This is the best movie...it portrays reality that happened I: So you are motivated? R14: Yeeeeessss	
R15	(disadvantage) cerita panjang	Too long	

Commented [AA59]: Also motivated

Commented [AA60]: Disadvantage- duration

	Implication: Ideas	Translation	Notes
R2			
R4	Sometimes sy terfikir...yg rosmah punye tu Ape ke namanya kak? Permata pintar? Permata kasih? If the budget goes to that place...nape x include some budget utk dislex people Or bt permata kasih kot namanya yayasan utk bantu yg dislex or yg disabilities ni	Sometimes it makes me think about rosmah's what was the name? Permata pintar? Permata kasih? If the budget goes to that place...why x include some budget for dislex people Or a foundation to support dyslexics or people with disabilities	
R8			
R9	First... Jangan mudah menyalahkan murid dan menidahkan hak dia di dalam kelas. Dia mungkin lain dari yang lain tp kita sabar. Gali dan cari apa yg perlu utk bantu dia Tp kat sekolah ni ada 2 org yg hyper dan sgt nakal. Jenis pukul kawan. Akhirnya masuk kelas khas Ye boleh dan x boleh. Sistem pendidikan di negara kita n bukan spt luar negara. Satu cikgu mengajar hampir keseluruhan subjek. Lepas tu kelas x lah sampai 40 org murid. So cikgu masih boleh memberi perhatian yg lebih PD yg overlimit. Saya tahun n ngajar kelas A 38 org. Ada yg tulis S terbalik lagi. Sampai hari ni saya x cam budak nya. Tambahan masuk kelas seminggu sekali. On penmanship: Yes... anak dah pra sekolah baru nampak mcm mana kecenderungan dan teknik mrk menulis. Lebih lagi anak kidal. Baru faham budak kidal n dia ada keselesaan dia sendiri. Ibu bapa kena ambil tau. Kalau anak tulis salah kena betulkan. Dan semua cikgu kena mahir dgn penmanship. Bukan hanya cikgu bahasa Melayu	First...don't blame students so easily and deny their rights in class. They might be different but be patient. Find out what you can do to help. But in this school there are 2 hyper students and very naughty. The type who hit friends. End up going to special class. We can and cannot. Our education system is not like overseas. One teacher teach almost all subjects. Then the class size does not reach 40 students. So teachers could still give attention to those with overlimit. This year I teach 38 students in a class. Some still write letter S in reverse manner. Till today I don't know who. Moreover, I only enter the class once a week. On penmanship: Yes...when the students are in kindergarten then we can see how they write. Especially left handed child. Understand that left handed child are more comfortable in their own ways. Parents should know this. If the child wrote wrongly, must correct them. And all teachers need to know penmanship. Not only Malay language teacher.	
R12	R12: As a teacher, once dh recognise certain kids yg kdg2 kita label 'blur'... 1. Simplify / shorten instructions	R12: As a teacher, once we've recognised certain kids whom we label as 'blur'...	

Commented [AA61]: Allocation of budget from the government

Commented [AA62]: Teachers should not judge too early. Identify their students

Commented [AA63]: Special school

Commented [AA64]: It can be done if class size reduced

Commented [AA65]: Teach penmanship. See R2 and R3

V3 Reflections: Tare Zaman Parr

	<p>Eg. Colour the shapes..cut them..and paste</p> <p>2. Model and ask the Ss to follow the instructions jugak..highlight the verb..with actions..like colour, cut,paste..</p> <p>3. Keep on checking</p> <p>Asking them after two or three mins</p> <p>The next step..</p> <p>And on the board pun ada instructions yg simple tu</p>			
R13	<p>Interviewer: Sblm saya lupa... konstruk 1&2 ialah kemahiran asas belajar utk membaca. Bagaimana dgn pelajar yg dah lepas konstruk 1&2 tp tak lepas konstruk 12 selepas tahun tiga?</p> <p>Interviewer: Saya rujuk respon cikgu yg ni ☹️</p> <p>R13: Ia akan diajar dim kelas pemulihan...</p> <p>Setiadak2nya guru perlu mempunyai ilmu disleksia dan ilmu murid bekeperluan khas</p> <p>R13: Asas</p> <p>Interviewer: Semua guru perlu tahu atau guru pemulihan saja?</p> <p>R13: Sewajibnya semua guru pemulihan...</p> <p>Yg sunatnya guru perdana...</p> <p>Sbb guru pemulihan yg berdamping dgn murid2 bermasalah spt ini</p> <p>PdPC yg biasa perlu dipulihkan utk membolehkan pelajar dyslexia mengikut PnP dialiran perdana</p>	<p>I: What happened to students who pass the 1st and 2nd LINUS construct but failed the 12th construct?</p> <p>R13: They'll be taught in remedial class so...</p> <p>At least teachers should have knowledge about dyslexia and SEN. The basic A must for Remedial teachers and an advantage to mainstream teachers... because the remedial teachers are the one who teach these students.</p> <p>T&L should be cured to enable dyslexic students to learn in mainstream classes.</p>		<p>Commented [AA66]: SOP – steps to teach 'blur' students</p> <p>Commented [AA67]: Teachers need exposure</p> <p>Commented [AA68]: Malaysian current Teaching and learning need remediation</p> <p>Commented [AA69]: Take away clerical burdens</p> <p>Commented [AA70]: As a result of added subjects, teachers end up teaching subjects that is not their field of expertise</p> <p>Commented [AA71]: Frustration</p> <p>Commented [AA72]: Equity and equality? See blueprint. John's comment on equity vs equality</p>
R14	<p>R14: Clerical workloads are more than teaching workloads. Teachers should teach according to their expertise...not teach just anything...reduce unnecessary subjects...timetable system should also be revamped... so many more...I'm just too tired to think.</p> <p>Pntg. I ambik kesungguhan guru utk didik anak muridnya tnpa mgira sapa ank didiknya... Apa yg muridnya suka, x suka, ape yg patut dn xpatut dilakukan oleh pntdbir.</p> <p>R14: ☹️</p>	<p>R14: Clerical workloads...</p> <p>Most importantly, I take the teachers' determination to teach any students regardless... what the students like, x like, what should and should not be done by administrator</p> <p>R14: ☹️</p>		
R15				

R12	<p>But actually bila dh slalu jd routine... I mean dh train dr awal thn Kita akan get used to simple instructions...short sentence of course haha...pastu models...buat actions sama2...and ulang satu kelas the steps...haha</p> <p>Sgt jarang bdk2 tny blk</p> <p>Sbb kwn2 dia akn ingatkan...</p> <p>And they use Eng 🗣️🗣️ Simple je sbb dia ulang...teacher ckp...</p> <p>" Colour the pictures/the garden etc"</p> <p>Cut the pictures etc</p> <p>And paste Hahaha sama dgn older student.</p> <p>Sbb diorg pening nnt byk2 ckp.no actions...tp akn ask them to repeat...randomly ask Ss to repeat...mcm tu And constantly ingatkan lepas A apa...then? Apa...cmtu la kak...</p>	<p>But actually when it becomes a routine... I mean I've trained them from beginning of the year We'll get used to simple instructions...short sentence of course haha...then role models... act together...and repeat the whole class the steps...haha</p> <p>Rarely they asked again because their friends will remind...</p> <p>And they use Eng 🗣️🗣️</p> <p>Simple because they repeat...teacher said...</p> <p>" Colour the pictures/the garden etc"</p> <p>Cut the pictures etc</p> <p>And paste Hahaha the same with older student</p>	<p>* Tips/ steps on giving instructions. Explain how R12 did in class. Example of instruction</p>	<p>Commented [AA73]: Found solutions – simple instructions, short sentences, doing things together, repetition.</p>
R13	<p>R13: Jika disleksia...</p> <p>Mmg guru pemulihan lah yg dipertanggungjawabkan utk membantu murid ini di sek</p> <p>Interviewer: Ada silibus khas ke macam mana?</p> <p>R13: X ada cikgu...</p> <p>Itu yg kita kena buat sesuatu...</p> <p>Antaranya spt yg saya sebutkan tadi...</p> <p>Bina bdm dan jalankan pdpc yg menarik minat murid</p> <p>Interviewer: So cikgu biasanya ajar pelajar dyslexia macam mana?</p> <p>R13: Cikgu akan bantu...</p> <p>Ikut cara guru + ilmu yg dapat dlm kursus...</p> <p>Biasanya murid kami disleksianya hanya kecil...</p> <p>Seperti terbalik huruf2 yg hampir sama bentuknya...</p> <p>Bukan sperti dlm cerita tu huruf boleh menari2 atau menulis perkataan dari belakang</p> <p>Interviewer: Dyslexia mesti tulis terbalik ke?</p> <p>Interviewer: Ada guru yg kata...kena tegur budak tu...tulis terbalik tu habit. Kalau ditegur...lama2 dia elok la tulis. Cikgu setuju?</p> <p>R13: Setuju...</p> <p>Itu merupakan salah satu pendekatan yg kita usahakan...</p> <p>Tapi sejuta kaedah yg kita boleh buat andai kita kreatif dan menjiwai murid spt ini</p>	<p>R13: If it's a case of dyslexia Remedial teachers will be responsible to help in school</p> <p>I: Is there special syllabus?</p> <p>R13: No...that's why we need to do something...like what I said earlier... build more teaching aids and conduct teaching and learning that gain the students' interest.</p> <p>I: How do you teach?</p> <p>R13: Teachers will help in their own ways + knowledge from the training...</p> <p>Normally our students are mild dyslexics...like writing reverse letters if the letters look alike...</p> <p>Not like the one in the movie where the letters dance or writing from back to front</p> <p>I: There's a teacher who said that we need to correct the students who write reverse letters. It's a habit... soon they will write correctly. Agree?</p> <p>R13: Agree...</p> <p>That is one of the way but there are many more if we are creative and understand the students like this.</p>	<p>* There is no severe case or teachers do not know how to identify? Remember R14 is a remedial teacher who is considered as 'SEN expert' who support dyslexic students.</p> <p>** Dyslexia can be cured. Problem is defined as basic</p>	<p>Commented [AA74]: There is no specific syllabus for dyslexic students. R13 teach remedial classes and dyslexic students. Suggested that more teaching aids are collected (refer to R4 comment on LINUS workshop – collecting teaching aids and lesson plan – as bank); think of how to gain students' interest</p> <p>Commented [AA75]: Teach dyslexics like how we were trained.</p> <p>Commented [AA76]: In Malaysia there is no severe cases like the one in the movie</p>
	<p>Interviewer: Jadi...bila budak tu dah tulis elok...adakah bermakna dia dah pulih daripada Dyslexia?</p> <p>R13: Kami sbg guru pemulihan hanya membantu murid menguasai kemahiran asas membaca dan menulis...</p> <p>Jika murid tersebut disleksia...</p> <p>Tetapi dlm pelajaran nya sudah seperti murid normal...</p> <p>Maka sbg seorg guru saya rasakan masalah murid tersebut telah selesai</p>	<p>I: If they can write correctly does that mean they are cured?</p> <p>R13: We as remedial teachers are just helping them to master basic reading and writing skills...</p> <p>If the students are dyslexics but they can learn like normal student...</p> <p>Therefore as teachers I think the student's problem is solved</p>	<p>literacy problem. Once cured, no further support is needed – case closed***</p> <p>Evidence to show Malaysian teachers lack of awareness and exposure on dyslexia</p>	<p>Commented [AA77]: Evidence to show LINUS programme is based on remediation.</p>

Appendix M : Data for Framing Analysis

Raw Data -Scenes Plotting

"Dyslexia: A Hidden Disability"

Apr 16, 2011 | 175,044 views | by [Craig Wa](#)

"Dyslexia: A Hidden Disability," produced by the Kennedy/Marshall Company, is an excellent documentary on adults and children who have dyslexia and the doctors and educators who are working to make a difference in their lives. It features interviews with Steven Spielberg, Charles Schwab, Whoopi Goldberg, Sally Shaywitz, and Craig Watson. Other interviews include:

00:01 [Narrator] I wonder what it feels like the first
 00:03 time the child is sitting in class and
 00:06 suddenly discovers that he or she can't
 00:09 do with everybody around them is doing [Graeme Hammon, MD, Professor of Surgery, Yale Medical School]
 00:11 had a terrible time reading my teachers -
 00:13 school couldn't understand it they
 00:16 thought I was a bright student but I
 00:17 simply could not read [Karen Santucci, MD, Professor/Chief, Pediatric Emergency Medicine, Yale]
 00:19 little bit different going through
 00:21 school I remember even at an early age
 00:24 having anxiety I was never the one who
 00:26 would volunteer to read out loud or give
 00:28 a speech or go to a speech class [David Boies, Attorney/Chairman, Boies, Schiller & Fisher, LLP]
 00:29 measure yourself against other children
 00:32 and when you can't read nearly as well as
 00:35 your classmates it is something that is
 00:37 very disturbing [Whoopi Goldberg, Actress/performer/writer/producer] I knew as a kid there

Handwritten notes in yellow: **Spectrum of SpLD (how are they affected)**, **What's like being dyslexic (subliminal, simulation)**, **Definition (norm, dyslexia)**, **tve (strength, speed)**

Handwritten notes in blue: **diff power**, **problem**, **Symptoms**, **when do I actually realize a student is impt or stupid?**, **I - first person**, **Person**, **3rd person**, **Problem**

Frames to framing

V1: Dyslexia Explained - What's It Like Being Dyslexic?			
Scene	Frame/frames	Framing	Notes
00:09 - 04:22	Simulation	Awareness	
04:23 - 04:53	Intro to problems	Awareness/identification	
04:53 - 05:18	Positive highlights	Awareness	Successful dyslexics
05:18 - 05:34	definition	Awareness	
05:34 - 06:08	Positive highlights	identification	Explanation from the psychologist
06:08 - 07:06	Describe intervention	intervention	
V2: Dyslexia - A Hidden Disability			
Scene	Frame/frames	Framing	Notes
00:01 - 00:17	Problems/Positive highlights	Awareness/intervention	Two types of Positive highlights
00:17 - 00:28	Symptoms/Positive highlights	Awareness/intervention	Throughout the video: 1 -
00:28 - 00:37	Problems/Positive highlights	Awareness/intervention	Outcomes of good intervention &
00:40 - 01:45	Symptoms/Positive highlights	Awareness/intervention	2 - School as an intervention
01:46 - 03:23	Problems/Positive highlights	Awareness/identification/intervention	
03:23 - 03:47	Positive highlights-Strengths	identification/awareness/intervention	
03:50 - 03:52	information	identification/awareness/intervention	
04:00 - 04:34	Simulation	identification/awareness/intervention	
04:34 - 06:43	Positive highlights-school	intervention	
V2: Dyslexia - A Hidden Disability			
Scene	Frame/frames	Framing	Notes
02:22 - 05:00	Simulation	Awareness	Symptoms - Implicit description
05:00 - 18:00	Simulation/Symptoms	Awareness	Problems - Explicit/ explained
18:02 - 22:03	Simulation/Problems	Awareness	
22:25 - 37:35	Simulation/Problems	Awareness	
37:37 - 40:19	Simulation/Problems/Creative	Awareness	
40:28 - 70:52	Simulation/Problems/Symptoms	Awareness	
70:56 - 77:28	Simulation/Problems/Positive Highlights-strengths	Awareness	
77:30 - 80:21	Simulation/Problems/screening	identification	
80:50 - 82:46	Simulation/Problems	identification	
82:46 - 84:42	Simulation/Misconception	Awareness	
84:58 - 89:15	Screening	identification	
89:23 - 99:47	Screening/identified	identification	
99:47 - 104:47	Definition/Misconception	identification	Problems defined/ misunderstood
104:55 - 109:11	Definition/Misconception	Awareness/identification	
109:18 - 114:09	Positive highlights-Strengths	Awareness/identification	Successful dyslexic
114:14 - 118:12	Simulation/Strengths	identification	
119:15 - 122:41	Proposed intervention	intervention	
125:05 - 151:44	Intervention	intervention	
151:47 - 154:22	Successful intervention - Outcomes	intervention	

Appendix N : Report to the Professional and Development Unit, MoE.

To: Tuan Haji Mohamad Nazuir Bin Ahmad Toee,
Executive Director (Ministry Transformation).

From: Aida Binti A.Rahman.

Subject: Teachers' Professional Development and Inclusive Education Policy: Summary for
Professional and Development Unit, Ministry of Education, Malaysia.


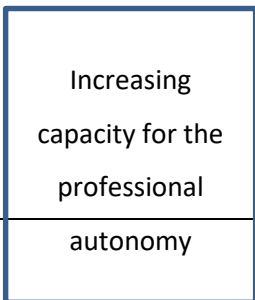
Teacher professional development (TPD) is more than a mere professional activities that enhance a teacher's knowledge and skills to teach. TPD according to (Day 1999), undertakes hugely complex intellectual and emotional endeavour of raising and maintaining standards of teaching and learning. There are many stakeholders involved directly and indirectly in education industry. Teachers are expected to not only contribute to students' academic success but also personal and social (Greenberg et al. 2003). Teaching is indeed a complicated profession as there are numerous roles for teachers to play. The understanding of teachers' roles is crucial in order to facilitate the understanding of the needs for TPD. The needs for TPD should have reflected the complexity of teachers' roles. If any of these roles were neglected in professional development, teachers' professionalism will be questioned.

With regards to policies, it is imperative for the TPD providers to understand that different TPD is required for different types of policy. Inclusive education policy is a policy reform. The existing literature also shows that when dealing with a policy reforms related to social justice, the reforms agents' beliefs and awareness should be transformed first (Kennedy, 2005; Fraser *et al.*, 2007; Kennedy, 2016). The transformation of the agents' beliefs is crucial as it serves as the foundation to cultural reconstruction (Fullan, 2007; Grimaldi and Serpieri, 2013; Hargreaves *et al.*, 2014). Educational policy reforms related to social justice aims at changing the culture of the education system that requires the teachers to be at their best in order to support the changes (Fullan, 2007; Day and Smethem, 2009; Hargreaves *et al.*, 2014) . The design of a TPD can be determined by identifying its purpose and objectives (Kennedy 2005). Purposes and objectives of TPD can be seen through the lenses of teachers' roles (Fraser et al. 2007; Stojiljković et al. 2012; Young 2016); policy and mandate (Kennedy 2005; Lingard 2010); and the expected outcome (Kennedy 2016; Young 2016). Once the purposes and objectives have been determined, the communication model of a TPD could be decided by considering the medium of the interaction (Mayer 2003; Kellsey and Taylor 2016) as well as the scale of the collaboration (Villegas-Reimers 2003). TPD for policy reform aims at establishing values of the teacher as reform agents.

Unlike TPD for policy transformation, TPD for policy renewal aims at enhancing technical skills like pedagogical content knowledge, technology pedagogical content knowledge, assessment and evaluation as well as teachers' pedagogical belief in adopting certain methodology to motivate students' learning. The expected outcomes of TPD for policy renewal most of the time emphasised on students' growth. In such TPD, teachers learn about how students' learn (Fraser et al. 2007) and mostly evaluated via tests and teachers' teaching performance (Kennedy 2005).

Table I presents the spectrum of CPD model. All the nine models are organised into these three broad categories – transmission, transitional and transformative (Kennedy 2005).

Table 1 – The Spectrum of CPD model

Model of CPD	Purpose of Model
The training model The award bearing model The deficit model The cascade model	Transmission 
The standards-based model The coaching/ mentoring model The community of practice model	Transitional 
The action research model The transformative model	Transformative

In my PhD research, I translated Kennedy's TPD model into two main agendas: transforming the changed agents' believes; and transmitting essential skills. The transformation agents include the policy makers, the administrators, the educators/ professional development designers/ facilitators and the teachers. The transformative process begins with establishing the agents' conception and believe on the inclusive education policy. Transformational TPD aims at addressing the agents in 'knowing- what'; 'knowing-how'; 'knowing-why'; 'knowing-when'; 'knowing-who' and 'knowing-almost everything needed to know' rather than only addressing the 'knowing- what' and 'knowing-how' like in a transmissive TPD. The transmitting process could only begin when the agents' conception and belief on the inclusive education policy are established.

For my PhD, I only focus at the most fundamental but neglected issue to be addressed, which is dyslexia. Dyslexia is a more complicated learning issue. Dyslexia is the umbrella of specific learning difficulties that is difficult to identify especially if the dyslexics do not exhibit other SpLD spectrum

such as autism, ADHD, Asperger, DCD which could be easily detected via behavioural and biological indicators. Due to Malaysian lack understanding of dyslexia conception, many dyslexic learners are left undiagnosed, misdiagnosed and marginalised in the system. The number is cumulating as statistically, 10-15% of world population are dyslexics. Figure 1 indicate the TPD concept applied in the study.

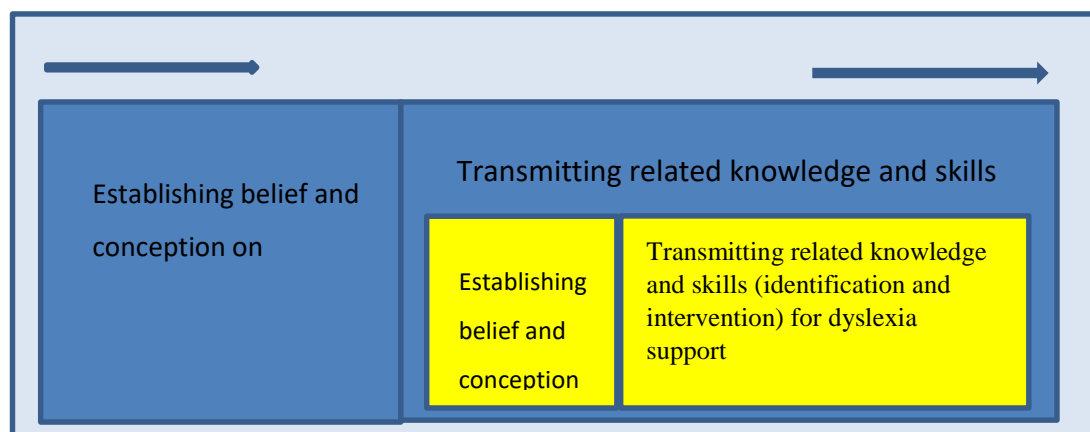


Figure 1- TPD for Dyslexia support within Malaysian Inclusive Education framework

Sahlberg (2007) highlighted that most countries that failed to implement policy reform such as inclusive education policy, implement TPD leading towards consequential accountability. Finland, however, opt for TPD leading towards intelligent accountability and trust-based professionalism. Therefore, Finland is able to learn about the policy reformation and use that learned knowledge to form a better adaption: not a simply mix-and-match-to-own-needs process. Lingard B (2010) highlighted the importance to learn from the global policy reform and avoid from policy borrowing. Transformative professional development has been widely researched in the United Kingdom, USA, Canada, Australia, Finland and other part of the countries where movement for equal rights for education has begun to receive attention (Hargreaves and Fink, 2006; Fullan, 2007; Greene *et al.*, 2008b; Lingard, 2010; Grimaldi and Serpieri, 2013; Hargreaves *et al.*, 2014) but less widely studied and implemented in most developing countries (Abosi and Koay, 2008; Ajoku-Christopher, 2012) and barely considered in Malaysia. Within the Malaysian educational context, reformation in educational policy has always been supported by transmissive professional development where teachers were given pedagogical input on how the reconstruction of the education system is taught to be effective that resulting in high stakes census tests as measurement tools (Fullan, 2007; Day and Smethem, 2009); increase teachers' heavy workload (Azita, 2012; Sharifah *et al.*, 2014); and displaced teachers' values by 'terrors of performativity' (Ball, 2003) that would jeopardise the success of the implementation of the educational change (Pajares, 1992).

Teacher Professional Development for Inclusive Education

Inclusive education policy aims at providing social justice to learners so that every child will be given equal opportunities to get proper education. Inclusive education has a long background history which could be traced back as far as more than hundred years. Inclusive education begins with the special need education movement; which later include other aspects such as social, religions, culture in 1980's and keep evolving in later years including sexuality aspect which make it a holistic inclusive policy. Inclusive education policy gained its momentum in 1994 when it was officially endorsed by Salamanca conference delegates. It is interesting to learn that inclusive education policy was gazetted as the 'solution' even before educators and researchers understood why the policy is the best policy to ensure equality in learning opportunities.

I would like to relate the above-mentioned dilemma with the evolution of theories of dyslexia (now known as Specific learning difficulties due to its spectrum). After reviewing previous literatures from medical and social journals, I concluded that there is a connection between the evolution of dyslexia theory and the evolution of inclusive education policy and its implementation. This information is imperative to help us understand why inclusive education policy require a transformational professional development. Further explanation will be based on figure 2 as follow. The figure is taken from my paper entitled '*Neurodiversity awareness: Is Malaysia there yet?*' presented at TVETIC 2018 conference. It has been accepted for a peer reviewed journal publication and in press.

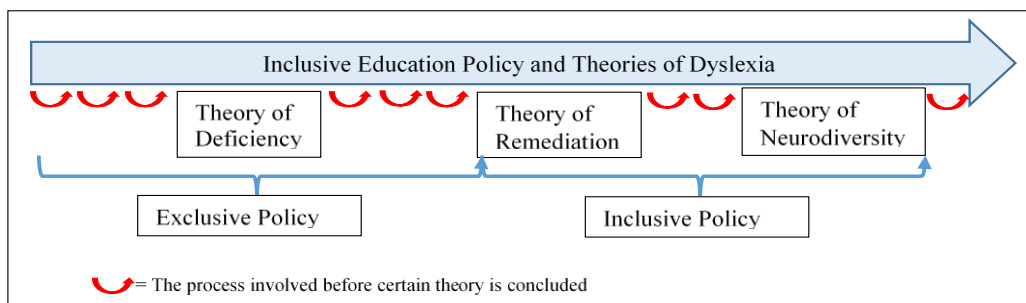


Figure 2 - Evolution of Theories of Dyslexia and Their Relation to Inclusive Education (Aida and Woollard 2018)

Dyslexia was identified as a form of disability when medical research claimed that dyslexia occurs due to the deficiency in the left hemisphere brain – a part called Broca that functions as symbols translator which send the signals to the auditory part of the brain. This deficiency has caused problems in reading because reading requires Broca to decode symbols (such as letters and numbers). This is the era where research on dyslexia is based on deficiency theory.

Nonetheless, social justice movement defended that dyslexia should not be categorised as a form of disability. Labelling dyslexics as a disabled person jeopardised dyslexics' opportunities in education and careers. Social science researches have proven that dyslexia 'condition' could be improved by good reading programmes. Medical researchers, too, has discovered that the Broca functions of dyslexics improved after the reading intervention programmes. This findings lead to new theoretical development which could be classified as remediation theory. Under the new remediation framework, research on interventions were carried out immensely. Research in both medical and educational fields show that remediation programmes focus on phonological intervention which helps to improve dyslexics' reading skills (Shaywitz et. al, 2005) and most effective in beginning readers (Norton et. al, 2015). Rimrodt et. al (2009) discovered that dyslexic's brain showed uncommon 'patterns of activation on this higher-level linguistic processing task (sentence comprehension) and that this does not appear to be solely accounted for by word recognition' (p.411). Scarborough et. al (2009) discovered that reading comprehension failures could occur partly independent from problems with word recognition particularly when children moved from learning-to-read stage (year 1 to 3) to reading-to-learn stage (year 4 and above) in later grades. The new direction in research has later affirm the neurodiversity theory which finally bring the synergy between medical and social researchers. With the neurodiversity framework, inclusive education system becomes more understood - identification and intervention climates are also changed. These recent developments in dyslexia research are encouraging but, according to Snowling (2013), "unfortunately, the field of dyslexia is plagued with supposed 'cures' that have no proper evidence base" (p.8). Current analysis of dyslexia conception; literacy and numeracy screening programmes; and literacy and numeracy intervention programmes in Malaysia are still evolve around remediation theory (Aida, 2018).

Reid (2016) urged that all teachers should be equipped with dyslexia support knowledge which include the identification and learning intervention skills. With this knowledge, learners profile could be created. This is because, "Successful intervention for reading disabilities depends on accurate assessment of a child's profile in terms of both accuracy and speed across all levels of reading, from the sub-word to connected text" (Norton & Wolf, p.448). Learners profile is extremely essential in ensuring learners' needs (learning, physical, etc.) are addressed and supported. It should begin from early year education (kindergarten) to tertiary education. The learners' profiles should be established before the learners leave primary education so that the learners' individual educational support could be identified before they could accelerate with knowledge search at secondary and tertiary levels. Established learners' profiles would ensure that all learners would receive appropriate supports (intervention), which is the essence for inclusive education system success.

Recommendations

1. Establishing learners' profile is extremely crucial in promoting success for inclusive education system. Hence, it is recommended that we:
 - a. Train all teachers for SpLD identification and early- intervention. (My PhD research is addressing the TPD content based on Neurodiversity framework. Further discussion on this matter is appreciated).
 - b. Our teachers were trained with General SEN skills, mostly focusing on (learning for) accommodating blind and deaf; and facilities for the OKU. We need to train experts in SpLD because the problems and solution context is different. Addressing SpLD in one SEN (MBK) category will put SpLD at the blind sides of the system (see Dzalani & Shamsuddin, 2014). At least ONE learning specialist should be assigned in every district. Learning specialist will assist teachers in identification and intervention process. Some learners may inquire learning aids. ICT is at the moment the learning tool for SpLD (strategy to be considered).
 - c. Learners profile should start from kindergarten, to be carried to tertiary level. Identification to start from kindergarten and should be established before learners left for secondary education. Learning support should have been identified by end of primary education. By end of primary education, learners' learning skills are equipped. Secondary education is the beginning of learning acceleration (learning skills will be utilised in maximize). Different roles and responsibilities assigned for teachers and learning specialists at kindergarten; lower primary; upper primary; secondary and tertiary.
 - i. Record on non-academic (80%) & academic skills (20%) at Kindergarten level (percentage is based on worldwide early education objectives)
 - ii. Continue recording and analysing academic skills (60%) and non- academic (40%). * percentage of academic vs non-academic should be determined.
 - iii. Intervention has been identified and will be fully utilised at Secondary and tertiary level. Secondary school teachers should continue recording and analysing academic skills so that learning intervention could be fully identified by the time the learners begin tertiary education.
- (* Under Neurodiversity framework - Educators do not have to worry about classifying SpLD into autism/ ADHD etc. categories. It is the Medical professional's responsibility to identify and provide medical intervention. Educators should only focus on problems with SpLD aka Dyslexia because it is the common problem of SpLD in learning prospect. Other aspects are medical. Hence, school should only assist when medication is prescribed. This is a huge concept to be explained in this summary.)
2. Children left primary school should have firm grounding in the basics learning skills. This is at the heart of the UK Department for Education's (DfE's) overarching strategy. Malaysia could employ the same strategy by:
 - a. Reducing the syllabus/ cognitive load for primary school students. In the UK, the aim is to develop literacy and numeracy skills. The primary school students only learn literacy (English language) and numeracy (mathematics). Other subjects (history, science, geography) are embedded into literacy subject. This is because year 1-3 is where learners learn and develop their literacy and numeracy skills. In year 4, learners is anticipated to have mastered their literacy and numeracy skills so that they can use them for learning. Thus, year 4-6 is the time to finalise the identification and early

intervention profile. Students will be given exposure to various knowledge and challenge when they are in secondary school because they are ready to learn. Secondary teachers have already know which learners have specific or special needs, which intervention is needed, which tools to be utilised etc – so secondary and tertiary teachers could support the learning process.

- b. Reducing class size (ideally not more than 30 students).
 - c. Since teachers in Malaysian system hop-in and hop-out the classroom every 30/45 minutes per period, identification process will be difficult. It is suggested that one full time class teacher/ teaching assistant is assigned to spend the whole day in classroom with the students for the whole year. They can function as a tutor and given the autonomy to decide which students need which additional exercise (homework) etc. (further elaboration to be discussed).
3. Restructure the evaluation and testing methodology. This will ease the process of changing the teaching and learning methodology. Vocational school is not necessarily the best place for students with learning difficulties. But vocational teaching and learning; and testing and evaluation methodology is the best. It best suits all learners despite any learning condition. Note that some SpLD are keen in science. Some could be medical doctors and specialist if given the chances (watch the interviews with dyslexics who turn out to be professionals at <https://www.youtube.com/watch?v=8m1fCz3ohMw>.) The link will take you to a video called Dyslexia: A Hidden Disability. Learning styles maybe a preference for those without learning difficulties but different learning styles is a remedy for those with SpLD. The approach is known as multisensory approach.
 4. In order to strategize and reconstruct the system, all transformation agents needs to undergo TPD and establish the right conception.
 - a. We may also consider online TPD. My analysis on available online TPD including MOOC for SpLD is not suitable for Malaysian educators (at the moment). The MOOC for SpLD designer, DR. Vincent Goetry has requested that I share my feedback with the International Dyslexia Association (IDA) committee members. My feedbacks on International Dyslexia Association MOOC has taken into consideration by IDA for their expansion planning. Their MOOC SpLD training is the improvement of Dr. Goetry's UNESCO project. It has been made compulsory for all American teachers during president Obama's administration. It has also become my PhD important contribution. For future project, I am planning to design online TPD for SpLD support in Malaysia.

References

- Aida, A.R, 2018. '*Neurodiversity awareness: Is Malaysia there yet?*' Paper presented at TVETIC 2018 conference.
- Educational Excellence Everywhere (Department for Education, UK)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/508447/Educational_Excellence_Everywhere.pdf
- Kennedy, A. (2005) Models of continuing professional development: a framework for analysis. *Journal of in-service education*, 31 (2), 235-250.
- Norton, E.S. and Wolf, M., 2012. *Rapid automatized naming (RAN) and reading fluency: Implications for understanding and treatment of reading disabilities*. Annual review of psychology, 63, pp.427-452.
- Norton, E.S., Beach, S.D. and Gabrieli, J.D., 2015. *Neurobiology of dyslexia*. Current opinion in neurobiology, 30, pp.73-78. Retrieved from <https://doi.org/10.1016/j.conb.2014.09.007>
- Peer, L. and Reid, G. eds., 2001. *Dyslexia: Successful inclusion in the secondary school*. Routledge.

Scarborough, H.S., Neuman, S. and Dickinson, D., 2009. *Connecting early language and literacy to later reading (dis) abilities: Evidence, theory, and practice*. Approaching difficulties in literacy development: Assessment, pedagogy and programmes, pp.23-38.

* This summary contains information from a PhD thesis which is in a viva progress. I would appreciate if any reproduction of the summary is avoided.

Appendix O : Abstracts for Published Articles

1) Article published in INTED2019 Proceedings: 1623-1630

COLLECTING DATA VIA INSTANT MESSAGING INTERVIEW AND FACE-TO-FACE INTERVIEW: THE TWO AUTHORS REFLECTIONS

A.R Aida¹, H. Fairuz², J. Woollard³

¹*Universiti Teknologi Malaysia (MALAYSIA)*

²*Universiti Pendidikan Sultan Idris (MALAYSIA)*

³*University of Southampton (UNITED KINGDOM)*

Abstract

The rise of digital communication has not only affected the way people in societies interact but also, it offers opportunities for researchers to interact with research participants. In previous years when telephone and email became the trending mode of communication, researchers started to employ telephone and email as the new tools for data collection. Nowadays, many people engage with instant messaging communication. Hence, this form of communication is an opportunity for researchers to explore as a mode for interview data collection. Nonetheless, instant messaging and face-to-face interactions are different in nature. Hence, it is worth understanding the affordances and the challenges of employing instant messaging interview (IMI) in comparison to face-to-face interview (FTFI) data collection mode. This paper draws on two authors' experiences of collecting qualitative data via IMI and FTFI. Findings of the study show that IMI and FTFI offer different affordances in the planning, executing and processing of data collection. The insights from the encounters inform other qualitative researchers in making decisions regarding the best methods available for their studies.

Keywords: Instant messaging interview (IMI), Face-to-face interview (FTFI), Data collection

2) Article accepted for peer-reviewed TVET journal [in press]. Presented at TVET International Conference 2018.

Neurodiversity awareness: Is Malaysia there yet?

Aida Binti A. Rahman ^{a,b} and Woollard, J.W ^a

a) University of Southampton, United Kingdom

b) Universiti Teknologi Malaysia, Malaysia

Correspondence Author email: aidarahman@utm.my; Binti A Rahman A.@soton.ac.uk

ABSTRACT

Scientific research on dyslexia has taken place for the past 50 years some tensions between education and cognitive neuroscience researchers. Clinical research on dyslexia via fMRI has finally revealed that the dyslexic brain works differently. The findings have brought in new synergy between research in education

and cognitive neuroscience supporting the neurodiversity movement. There is a connection between the constructs of neurodiversity, specific learning difficulties and the more focused studies of dyslexia. This qualitative study was conducted to understand the Malaysian mainstream primary school teachers' beliefs about SpLD and the current framework for Malaysian literacy support programme. The data was collected via social media focus group discussion and individual instant messaging interviews from forty-one teachers regarding their views and experiences in literacy programme. The analysis was deductive based on a framework of teachers' knowledge, skills and understanding of dyslexia. The findings revealed that the current programme is built on theories of remediation, that the teachers have exhibited good levels of understanding of remediation, but not yet understand neurodiversity.

Keywords: *Neurodiversity, Dyslexia, Equal education, Mainstream primary school, Literacy support programme*

List of References

- Aaker JL and Lee AY (2001) "I" Seek Pleasures and "We" Avoid Pains: The Role of Self-Regulatory Goals in Information Processing and Persuasion. *Journal of Consumer Research* 28(1): 33-49
- Abbott W (2017) Poster Presenters Images and Poster Abstracts. *Journal of Student Research at Indiana University East* 1(1)
- Abdul Rahman I and Nazariyah BS (2013) Implementation of Linus Programme Based on the Model of Van Meter and Van Horn. *Malaysian Online Journal of Educational Sciences* 1(2): 25-36
- Abosi O and Koay TL (2008) Attaining Development Goals of Children with Disabilities: Implications for Inclusive Education. *International Journal of Special Education* 23(3): 1-10
- Abrams K and Meyers C (2012) From Opposite Corners: Comparing Persuasive Message Factors and Frames in Opposing Organizations' Websites. *Journal of Applied Communications* 96(1): 54-67
- Abzol MRBA and Haron I (2017) The Effectiveness of the Integrated Sound-Word Method to Improve the Skills in Reading, Writing and the Reading Interest of Bahasa Melayu Among the Pupils with Dyslexia. *Advanced Science Letters* 23(3): 2048-2051
- Adnan AH and Hafiz IA (2001) A Disabling Education: The Case of Disabled Learners in Malaysia. *Disability & Society* 16(5): 655-669
- Ahmad SZ and Mutalib AA (2015) Preliminary Study: An Investigation on Learning Assistance Requirement Among Low Achievers in Primary Schools. *International Journal of Computer Applications* 114(2)
- Ahmed MSEM (2016) Tool for Computer Teachers' CPD-MOOCs: Opportunities and Challenges. *International Journal of Advanced Studies in Computers, Science and Engineering* 5(11): 183
- Aida AR, Fairuz H, and Woollard J (2019) Collecting Data Via Instant Messaging Interview And Face-To-Face Interview: Two Researchers' Reflections. *INTED2019 Proceedings*. 1623-1630

- Ajoku-Christopher OA (2012) *Factors Influencing the Lack of Dyslexia Awareness and its Impact on Inclusive Learning in Selected Primary Schools in Owerri West Local Government Area, Imo State, Nigeria*. University of Greenwich University.
- Albarracín D and Kumkale GT (2003) Affect as Information in Persuasion: A Model of Affect Identification and Discounting. *Journal of Personality and Social Psychology* 84(3): 453
- Ali MM, Mustapha R and ZM (2006) An Empirical Study on Teachers' Perceptions towards Inclusive Education in Malaysia. *International Journal of Special Education* 21(3):36-44
- Alur M (2001) Some Cultural and Moral Implications of Inclusive Education in India—A Personal View. *Journal of Moral Education* 30(3): 287-292
- Amar H (2008) Meeting the Needs of Children with Disability in Malaysia. *Medical Journal Malaysia* 63(1): 1
- Anderson AJ, Kiela D, Clark S and Poesio M (2017). Visually Grounded and Textual Semantic Models Differentially Decode Brain Activity Associated with Concrete and Abstract Nouns. *Transactions of the Association of Computational Linguistics* 5(1): 17-30
- Anderson T (2004) Towards a Theory of Online Learning. *Theory and Practice of Online Learning* 2: 109-119
- Arkorful V and Abaidoo N (2015) The Role of E-Learning, Advantages and Disadvantages of Its Adoption in Higher Education. *International Journal of Instructional Technology and Distance Learning* 12(1): 29-42
- Armstrong T (2010) *Neurodiversity: Discovering the Extraordinary Gifts of Autism, ADHD, Dyslexia, and Other Brain Differences*. Cambridge, MA: Da Capo Lifelong.
- Armstrong T (2012) First, Discover Their Strengths. *Educational Leadership* 70(2): 10-16
- Armstrong T (2015) The Myth of The Normal Brain: Embracing Neurodiversity. *AMA Journal of Ethics* 17(4): 348
- Aromataris E, Fernandez R, Godfrey CM, Holly C, Khalil H and Tungpunkom P (2015) Summarizing Systematic Reviews: Methodological Development, Conduct and Reporting of an Umbrella Review Approach. *International Journal of Evidence-Based Healthcare* 13(3): 132-140
- Au W (2011) Teaching under The New Taylorism: High-Stakes Testing and The Standardization of The 21st Century Curriculum. *Journal of Curriculum Studies* 43(1): 25-45

- Avalos B (2011) Teacher Professional Development in Teaching and Teacher Education over Ten Years. *Teaching and Teacher Education* 27(1): 10-20
- Avramidis E and Norwich B (2002) Teachers' Attitudes Towards Integration/Inclusion: A Review of The Literature. *European Journal of Special Needs Education* 17(2): 129-147
- Azita A (2012) Secondary School Teachers' Workload in Batu Pahat, Johor Darul Takzim. *Master's Thesis, Universiti Teknologi Malaysia, Skudai Johor.*
- Azman H, Salman A, Razak NA, Hussin S, Hasim MS and Hassan MA (2014) Determining Digital Maturity among ICT Users in Malaysia. *Jurnal Komunikasi, Malaysian Journal of Communication* 30(1): 23-35
- Baden C (2010) *Communication, Contextualization & Cognition: Patterns & Processes of Frames' Influence on People's Interpretations of The EU Constitution*. Available at: UvA-DARE, the institutional repository of the University of Amsterdam (UvA) <http://dare.uva.nl/document/184956> [Accessed 2 April 2017]
- Bailey L, Nomanbhoy A and Tubpun T (2015) Inclusive Education: Teacher Perspectives from Malaysia. *International Journal of Inclusive Education* 19(5): 547-559.
- Ball SJ (2003) The teacher's Soul and The Terrors of Performativity. *Journal of Education Policy* 18(2): 215-228
- Bandura A (2001) Social Cognitive Theory of Mass Communication. *Media Psychology* 3(3): 265-299
- Baresch B, Hsu SH and Reese S (2010) The Power of Framing: New Challenges for Researching The Structure of Meaning in News. *The Routledge Companion to News and Journalism. London: Routledge*: 637-647
- Barquero LA, Davis N. and Cutting LE (2014) Neuroimaging of Reading Intervention: A Systematic Review and Activation Likelihood Estimate Meta-Analysis. *PloS One* 9(1): 83668.
- Beebe L (1988) Five Sociolinguistic Approaches to Second Language Acquisition. *Issues in Second Language Acquisition: Multiple Perspectives*: 43-78
- Bell B and Gilbert JK (1996) *Teacher Development: A Model from Science Education*. Psychology Press.
- Ben-Peretz M, Mendelson N and Kron FW (2003) How teachers in Different Educational Contexts View Their Roles. *Teaching and Teacher Education* 19(2): 277-290

- Bendassolli, P.F. (2013) Theory Building in Qualitative Research: Reconsidering The Problem of Induction. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 14(1) Art.25. Available at: <http://nbn-resolving.de/urn:nbn:de:0114-fqs1301258> [Accessed 8 March 2016]
- Bender WN, Vail CO and Scott K (1995) Teachers Attitudes toward Increased Mainstreaming: Implementing Effective Instruction for Students with Learning Disabilities. *Journal of Learning Disabilities* 28(2): 87-94
- Berliner D (2011) Rational Responses to High Stakes Testing: The Case of Curriculum Narrowing and the Harm that Follows. *Cambridge Journal of Education* 41(3): 287-302
- Biocca F, Harms C and Burgoon JK (2003) Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. *Presence: Teleoperators and Virtual Environments* 12(5): 456-480
- Biondi-Zoccai G (2016) Umbrella Reviews. *Evidence Synthesis with Overviews of Reviews and Meta-Epidemiologic Studies*. Cham, Switzerland: Springer International.
- Biswas M, Izzard R and Roshan S (2017) What Is Taught about Diversity and How Is It Taught? A 2015 Update of Diversity Teaching at US Journalism and Mass Communication Programs. *Teaching Journalism and Mass Communication* 7(1): 1
- Boudana S (2008) Frames and Keywords: On the Significance of these Related Tools of Analysis and on a Method for Determining them. *ICA Annual Conference, Montreal, Canada*.
- Boyatzis RE (1998) *Transforming Qualitative Information: Thematic Analysis and Code Development*. Sage.
- Braddock (1958) In McQuail D and Windahl S (2015) *Communication Models for the Study of Mass Communications*. Routledge.
- British Dyslexia Association. What-are-specific-learning-difficulties. Available at: <http://www.bdadyslexia.org.uk/educator/what-are-specific-learning-difficulties>. [Accessed 17 May 2017]
- Brookfield S (1984) Self-Directed Adult Learning: A Critical Paradigm. *Adult Education Quarterly* 35(2): 59-71
- Brookfield SD (2012) Critical Theory and Transformative Learning. *The Handbook of Transformative Learning: Theory, Research, and Practice*: 131-146

- Brown J and Bell S (2014) Supporting Young People with Dyslexia in International Schools: A Case Study Example of Current Provision in Southeast Asia. *Support for Learning* 29(2): 154-166
- Campbell E (2012) Teacher Agency in Curriculum Contexts. *Curriculum Inquiry* 42(2): 183-190
- Cancer A, Manzoli S and Antonietti A (2016) The Alleged Link Between Creativity and Dyslexia: Identifying the Specific Process in which Dyslexic Students Excel. *Cogent Psychology* 3(1): 1190309.
- Carboni C (2007) Film Spectatorship and Subjectivity: Semiotics, Complications, Satisfaction. *Unpublished M. A. Thesis thesis University of Stellenbousch University*
- Chadbourne R (2000) The New Industrial Relations, Teacher Unions and Educational Reform. *Change (Sydney, NSW)* 3(2): 19
- Che Normah CD ,Shalisah S and Nor'zam M (1999) Behavior Profiles of Specific Learning Disabled and School Children. *Malaysian Journal of Psychiatry* 7(2): 35-44.
- Chen WW, Schoeberl B, Jasper PJ, Niepel M, Nielsen UB, Lauffenburger DA and Sorger PK (2009) Input–Output Behavior of Erbb Signaling Pathways as Revealed by a Mass Action Model Trained Against Dynamic Data. *Molecular Systems Biology* 5(1): 239
- Chia LY (2013) Persuasive Messages on Information System Acceptance: A Theoretical Extension of Elaboration Likelihood Model and Social Influence Theory. *Computers in Human Behavior* 29(1): 264-275
- Chick NL, Karis T and Kernahan C (2009) Learning from Their Own Learning: How Metacognitive and Meta-Affective Reflections Enhance Learning in Race-Related Courses. *International Journal for the Scholarship of Teaching and Learning* 3(1): 16
- Choi YJ and Lee JH (2006) The role of A Scene in Framing a Story: An Analysis of a Scene's Position, Length, and Proportion. *Journal of Broadcasting & Electronic Media* 50(4): 703-722.
- Chong PW and J. Graham L (2016) Discourses, Decisions, Designs: 'Special' Education Policy-Making in New South Wales, Scotland, Finland and Malaysia. *Compare: A Journal of Comparative and International Education*: 1-18
- Cierniak G, Scheiter K and Gerjets P (2009) Explaining the Split-Attention Effect: Is The Reduction of Extraneous Cognitive Load Accompanied by an Increase in Germane Cognitive Load? *Computers in Human Behavior* 25(2): 315-324

- Clark JM and Paivio A (1991) Dual Coding Theory and Education. *Educational Psychology Review* 3(3): 149-210
- Cohen L and Manion L (1994) *Research Methods in Education*. (4th ed.) London: Routledge. In Mackenzie N and Kriple S (2006). Research Dilemmas: Paradigms, Methods and Methodology. *Issues In Educational Research* 16(2): 193-205.
- Cohen J. and Weimann G. (2000) Cultivation Revisited: Some Genres Have Some Effects on Some Viewers. *Communication Reports* 13(2): 99-114.
- Cooper R (2014) *Neurodiversity and Dyslexia: Compensatory Strategies, or Different Approaches?* London: LSE
- Crabtree B. and Miller W. (1999) In Fereday J and Muir-Cochrane E (2006) Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods* 5(1): 80-92.
- Creswell JW (2003) *Research Design : Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, California, London: Sage. 2nd ed.
- Crosby RH, Joy (2000) AMEE Guide No 20: The Good Teacher is More Than a Lecturer-The Twelve Roles of The Teacher. *Medical Teacher* 22(4): 334-347
- Cuzack (2014) MOOC Inphographics. MOOCs – Think Massively. In Ahmed MSEM (2016) Tool for Computer Teachers' CPD-MOOCs: Opportunities and Challenges. *International Journal of Advanced Studies in Computers, Science and Engineering*, 5(11): 183.
- Day C (1999) In Day C and Sachs J (2004) Professionalism, performativity and empowerment: Discourses in the Politics, Policies and Purposes Of Continuing Professional Development. *International Handbook on the Continuing Professional Development of Teachers*.
- Day (2004) In Day C and Sachs J (2004) Professionalism, Performativity and Empowerment: Discourses in The Politics, Policies and Purposes of Continuing Professional Development. *International Handbook on the Continuing Professional Development of Teachers*.
- Day C and Smethem L (2009) The Effects of Reform: Have Teachers Really Lost Their Sense of Professionalism? *Journal of Educational Change* 10(2-3): 141-157
- Day C and Sachs J (2004) Professionalism, Performativity and Empowerment: Discourses in The Politics, Policies and Purposes of Continuing Professional Development. *International Handbook on the Continuing Professional Development of Teachers*.

- Dayton E and Henriksen K (2007) Communication Failure: Basic Components, Contributing Factors, and The Call for Structure. *The Joint Commission Journal on Quality and Patient Safety* 33(1): 34-47
- Derry SJ (2006) eSTEP as a Case of Theory-Based Web Course Design. *Collaborative Learning, Reasoning and Technology*: 171-196
- Derry SJ, Hmelo-Silver CE, Nagarajan A, Chernobilsky E, Feltovich J and Halfpap B (2005) Making A Mesh of It: A STELLAR Approach to Teacher Professional Development. *Proceedings of The 2005 Conference on Computer Support for Collaborative Learning: Learning 2005: The Next 10 Years! International Society of the Learning Sciences*: 105-114
- Detel (2011) In Mantzavinos C (2016) Hermeneutics. Available at: <https://plato.stanford.edu/entries/hermeneutics/> [Accessed 9 February 2018]
- Devaraj S, Rosian S, Noah SM and Mahyuddin R (2009) Correlations of Symptoms of Dyslexia with Academic Achievement and Behavioral Problems in a Malaysian Primary School. *Journal on Educational Psychology* 2(4): 74-84
- Dillabough J-A (1999) Gender Politics and Conceptions of The Modern Teacher: Women, Identity and Professionalism. *British Journal of Sociology of Education* 20(3): 373-394
- Dirkx JM (2001) The Power of Feelings: Emotion, Imagination, and The Construction Of Meaning in Adult Learning. *New Directions for Adult and Continuing Education* 2001(89): 63-72
- Drakulich KM and Kirk EM (2016) Public Opinion and Criminal Justice Reform: Framing Matters. *Criminology and Public Policy* 15(1): 171-177
- Dubois A and Gadde L-E (2002) Systematic Combining: An Abductive Approach to Case Research. *Journal of Business Research* 55(7): 553-560
- Dzalani H and Shamsuddin K (2014) A Review of Definitions and Identifications of Specific Learning Disabilities in Malaysia and Challenges in Provision of Services. *Pertanika Journal of Social Sciences & Humanities* 22(1)
- Edwards A, Elwyn G, Covey J, Matthews E and Pill R (2001) Presenting Risk Information A Review of the Effects of Framing and Other Manipulations on Patient Outcomes. *Journal of Health Communication* 6(1): 61-82
- Edwards D and Potter J (1993) Language and Causation: A Discursive Action Model of Description and Attribution. *Psychological Review* 100(1): 23

- Edwards D and Potter J (2005) 11 Discursive Psychology, Mental States and Descriptions. *Conversation and Cognition*: 241
- Ehardt K (2009) Dyslexia, Not Disorder. *Dyslexia* 15(4): 363-366.
- Eleweke CJ and Rodda M (2002) The Challenge of Enhancing Inclusive Education in Developing Countries. *International Journal of Inclusive Education* 6(2): 113-126
- Elliott JG and Grigorenko EL (2014) *The dyslexia debate* (14). Cambridge University Press.
- Elmore RF (2002) Bridging the Gap Between Standards and Achievement: The Imperative for Professional Development in Education. *Secondary Lenses on Learning Participant Book: Team leadership for Mathematics in Middle and High Schools*: 313-344
- Entman RM (1993) Framing: Toward Clarification of A Fractured Paradigm. *Journal of Communication* 43(4): 51-58
- Evans LM and Petty RE (2003) Self-Guide Framing and Persuasion: Responsibly Increasing Message Processing to Ideal Levels. *Personality and Social Psychology Bulletin* 29(3): 313-324
- Evans P (2015) Emergent Discourses of Learning and Community Formation: Exploring Social Media for Professional Learning. *Handbook of Research Methods on Human Resource Development*: 184
- Fereday J and Muir-Cochrane E (2006) Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods* 5(1): 80-92.
- Ferguson E and Gallagher L (2007) Message Framing with Respect to Decisions about Vaccination: The Roles of Frame Valence, Frame Method and Perceived Risk. *British Journal of Psychology* 98(4): 667-680
- Fraser C, Kennedy A, Reid L and McKinney S (2007) Teachers' Continuing Professional Development: Contested Concepts, Understandings and Models. *Journal of In-Service Education* 33(2): 153-169
- Frith U (1995) Dyslexia: Can We Have a Shared Theoretical Framework? *Educational and Child Psychology*.
- Fullan M (2007) *The New Meaning of Educational Change*. Routledge
- Fyle CO (2013) Teacher Education Moocs for Developing World Contexts: Issues and Design Considerations. *Sixth Conference of MIT's Learning International Networks Consortium (LINC)* June: Available at:

<https://pdfs.semanticscholar.org/3b4e/4eb5dc353a992f8fbbaa22157ec8e66fbed7e.pdf> [Accessed 31 May 2016]

- Gabrieli JD (2009) Dyslexia: A New Synergy between Education and Cognitive Neuroscience. *Science* 325(5938): 280-283
- Gaible E and Burns M (2005) Using Technology to Train Teachers: Appropriate Uses of ICT for Teacher Professional Development in Developing Countries. *Online Submission* ERIC.
- Ganegoda DB and Folger R (2015) Framing Effects in Justice Perceptions: Prospect Theory and Counterfactuals. *Organizational Behavior and Human Decision Processes* 126: 27-36
- Garrison DR (2003) Cognitive Presence for Effective Asynchronous Online Learning: The Role of Reflective Inquiry, Self-Direction and Metacognition. *Elements of Quality Online Education: Practice and Direction* 4(1): 47-58
- Garrison DR, Anderson T and Archer W (2001) Critical Thinking, Cognitive Presence, and Computer Conferencing in Distance Education. *American Journal of Distance Education* 15(1): 7-23
- Garrison DR, Anderson T and Archer W (2010) The First Decade of the Community of Inquiry Framework: A Retrospective. *The Internet and Higher Education* 13(1-2): 5-9
- Geise S and Baden C (2015) Putting the Image Back into The Frame: Modeling The Linkage between Visual Communication and Frame-Processing Theory. *Communication Theory* 25(1): 46-69
- Gellevij M, Van Der Meij H, De Jong T and Pieters J (2002) Multimodal Versus Unimodal Instruction in a Complex Learning Context. *The Journal of Experimental Education* 70(3): 215-239
- Gewirtz S and Cribb A (2002) Plural conceptions of social justice: Implications for policy sociology. *Journal of Education Policy*, 17(5): 499-509 in Norwich B (2007) *Dilemmas of difference, inclusion and disability: International perspectives and future directions*. Routledge.
- Ghani MZ and Ahmad AC (2011) *Pengantar Pendidikan Khas* (Penerbit USM). Penerbit Usm.
- Ginns, P (2006) Integrating Information: A Meta-Analysis of The Spatial Contiguity and Temporal Contiguity Effects. *Learning and Instruction* 16(6): 511-525
- Gitlin T (1980) *The Whole World is Watching: Mass Media in the Making & Unmaking of The New Left*. Univ of California Press.

- Gomez C (2004) Dyslexia in Malaysia. *International book of dyslexia: A Guide to Practice and Resources* Chapter 34: 158-163.
- Graby S (2015) Neurodiversity: Bridging the Gap Between the Disabled People's Movement and the Mental Health System Survivors' Movement. *Madness, Distress and the Politics of Disablement*: 231-244
- Grant MJ and Booth A (2009) A Typology of Reviews: An Analysis of 14 Review Types and Associated Methodologies. *Health Information & Libraries Journal* 26(2): 91-108
- Greenberg MT, Weissberg RP, O'brien MU, Zins JE, Fredericks L, Resnik H and Elias MJ (2003) Enhancing School-Based Prevention and Youth Development Through Coordinated Social, Emotional, and Academic Learning. *American Psychologist* 58(6-7): 466
- Greene JA, Azevedo R and Torney-Purta J (2008a) Modeling Epistemic and Ontological Cognition: Philosophical Perspectives and Methodological Directions. *Educational Psychologist* 43(3): 142-160
- Greene WL, Musser PM, Casbon J, Caskey MM, Samek LL and Olson M (2008b) Caught in the Middle Again: Accountability & the Changing Practice of Middle School Teachers. *Middle Grades Research Journal* 3(4)
- Griffin E and Pollak D (2009) Student Experiences of Neurodiversity in Higher Education: Insights from the BRAINHE project. *Dyslexia* 15(1): 23-41
- Grimaldi E and Serpieri R (2013) Privatising Education Policy-Making in Italy: New Governance and the Reculturing of a Welfarist Education State. *Education Inquiry* 4(3): 226-15
- Gurney JN (1985) Not One of the Guys: The Female Researcher in a Male-Dominated Setting. *Qualitative Sociology* 8(1): 42-62.
- Goffman E (1974) *Frame Analysis: An essay on the Organization of Experience*. Harvard University Press.
- Hallahan K (1999) Seven Models of Framing: Implications for Public Relations. *Journal of Public Relations Research* 11(3): 205-242
- Hanita H, Hadina H and Zaliza MN (2008) *Persuasive Strategies of Tourism Discourse*. Johor: UTM Press
- Hanita H and Van Leeuwen T (2008) Semiotic Analysis: Compositional Meanings of Corporate We Pages. In Hadina H and Hanita H (eds) *New Perspectives in Language and Communication Research*. Malaysia: Universiti Teknologi Malaysia.

- Hargrave TJ and Van de Ven AH (2006) A Collective Action Model of Institutional Innovation. *Academy of Management Review* 31(4): 864-888
- Hargreaves A (1998) The Emotional Politics of Teaching and Teacher Development: With Implications for Educational Leadership. *International Journal of Leadership in Education* 1(4): 315-336
- Hargreaves A and Fink D (2006) Canadian Approach to School Improvement and Educational Change. *School Improvement: International Perspectives*: 257-280
- Hargreaves A and Fullan MG (1992) *Understanding Teacher Development*. Teachers College Press. New York. Available at: <https://eric.ed.gov/?id=ED369784> [Accessed 12 April 2016]
- Hargreaves A, Lieberman A, Fullan M and Hopkins D (2014) *International Handbook of Educational Change: Part Two*. Springer
- Harland J and Kinder K (1997) In Harland J and Kinder K (2006) Teachers' Continuing Professional Development: Framing a Model of Outcomes. *Journal of In-Service Education* 23(1): 71-84
- Harland J and Kinder K (2006) Teachers' Continuing Professional Development: Framing a Model of Outcomes. *Journal of In-Service Education* 23(1): 71-84
- Harris A, Jones M and Huffman J (2017) *Teachers Leading Educational Reform: The Power and Potential of Professional Learning Communities*. London: Routledge.
- Heiderich T (2018) Cinematography Techniques: The Different Types of Shots in Film. *Ontario Mining Association*. Available at: November 2018 from <https://www.oma.on.ca/en/contestpages/resources/free-report-cinematography.pdf>
- Hirsh JB, Kang SK and Bodenhausen GV (2012) Personalized Persuasion Tailoring Persuasive Appeals to Recipients' Personality Traits. *Psychological Science* 23(6): 578-581
- Høien T and Sundberg P (2000) *Dyslexia: From Theory to Intervention Vol 18*. Springer Science & Business Media
- Holloway J and Brass J (2018) Making Accountable Teachers: The Terrors and Pleasures of Performativity. *Journal of Education Policy* 33(3): 361-382.
- Holmes B and Gardner J (2006) *E-learning: Concepts and Practice*. Sage. London
- Homer PM and Yoon S-G (1992) Message Framing and The Interrelationships among Ad-Based Feelings, Affect, and Cognition. *Journal of Advertising* 21(1): 19-33

- Hornstra L, Denessen E, Bakker J, van den Bergh L and Voeten M (2010) Teacher Attitudes Toward Dyslexia: Effects on Teacher Expectations and The Academic Achievement of Students with Dyslexia. *Journal of Learning Disabilities* 43(6): 515-529
- Howard-Jones PA (2014) Neuroscience and Education: Myths and Messages. *Nature Reviews Neuroscience*, 15(12), pp.817-824.
- Hussin MKAB and Hamdan ARB (2016) Effect of Knowledge, Readiness and Teaching Technique in Inclusive Practices Among Mainstream Teachers in Malaysia. *International Journal of Early Childhood Special Education* 8(1).
- Ivic et al. (2001) In Stojiljković S, Todorović J, Đigić G and Dosković Z (2014) Teachers' Self-Concept and Empathy. *Procedia-Social and Behavioral Sciences* 116: 875-879.
- Igartua JJ, Cheng L and Lopes O (2003) To Think or Not to Think: Two Pathways towards Persuasion by Short Films on AIDS Prevention. *Journal of Health Communication* 8(6): 513-528
- Imel S (2002) Metacognitive Skills for Adult Learning. Trends and Issues Alert. Available at: <https://files.eric.ed.gov/fulltext/ED469264.pdf> [Accessed 20 March 2016]
- Internet World Stats (2016) Malaysia Internet Usage Stats and Marketing Report.
- IPGIPOH Q6 (April 5, 2019) Forum Pendidikan Khas Zero Reject Policy Ipg Ipoh Available at: <https://www.youtube.com/watch?v=3xnMMf4cziA> [Accessed 29 March 2020]
- Jayabalan M, Rana ME and Firdaus MRA (2016) A Prototype for Interactive Enhancements of Malaysian Digital Newspapers. *Research and Development (SCOREd), 2016 IEEE Student Conference*: 1-5
- Jankie D (2004) Tell Me Who You Are": Problematizing the Construction and Positionalities of "Insider"/"Outsider" of A "Native" Ethnographer in a Postcolonial Context. *Decolonizing Research In Cross-Cultural Contexts: Critical Personal Narratives*: 87-105.
- Jelas ZM (2010) Learner Diversity and Inclusive Education: A New Paradigm for Teacher Education in Malaysia. *Procedia - Social and Behavioral Sciences* 7: 201-204
- Jelas ZM and Mohd Ali M (2012) Inclusive education in Malaysia: Policy and Practice. *International Journal of Inclusive Education* 18(10): 991-1003
- Jordan A, Schwartz E and McGhie-Richmond D, (2009) Preparing teachers for inclusive classrooms. *Teaching and teacher education*, 25(4), pp.535-542.
- Kalyuga et al (1998) in Kalyuga S (2009) The Expertise Reversal Effect. *Managing Cognitive Load in Adaptive Multimedia Learning*. IGI Global: 58-80

- Kalyuga S (2009) The Expertise Reversal Effect. *Managing Cognitive Load in Adaptive Multimedia Learning*. IGI Global: 58-80
- Kapoula Z, Ruiz S, Spector L, Mocerovi M, Gaertner C, Quilici C and Vernet M (2016) Education Influences Creativity in Dyslexic and Non-Dyslexic Children and Teenagers. *PloS one* 11(3): e0150421
- Kehrwald B (2008) Understanding Social Presence in Text-Based Online Learning Environments. *Distance Education* 29(1): 89-106
- Kellsey D and Taylor AM (2016) *The Learning Wheel*. St Albans: Critical Publishing.
- Kelly K and Phillips S (2016) *Teaching Literacy to Learners with Dyslexia: A Multi-Sensory Approach*. Sage.
- Kelly K (2019) Scoping Review of the Evidence Base for Dyslexia-friendly Classroom Teaching and Whole School Approaches Available at <https://www.sendgateway.org.uk/resources.scoping-review-of-the-evidence-base-for-dyslexiafriendly-classroom-teaching-and-whole-school-approaches.html> [Accessed 15 April 2020]
- Kennedy A-M (2016) Macro-social Marketing. *Journal of Macromarketing* 36(3): 354-365
- Kennedy A (2005) Models of Continuing Professional Development: A Framework for Analysis. *Journal of In-Service Education* 31(2): 235-250
- Khan BH (2005) Learning Features in an Open, Flexible, and Distributed Environment. *AACE Journal* 13(2): 137-153
- Killingsworth MA and Gilbert DT (2010) A Wandering Mind is an Unhappy Mind. *Science* 330(6006): 932-932
- Kim SB and Kim DY (2014) The Effects of Message Framing and Source Credibility on Green Messages in Hotels. *Cornell Hospitality Quarterly* 55(1): 64-75
- Klette K (2000) Working-Time Blues. *The Life and Work of Teachers: International Perspectives in Changing Times*: 146-58
- Knowles MS, Holton III EF and Swanson RA (2014) *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*. Routledge
- Kormos J and Nijakowska J (2017) Inclusive Practices in Teaching Students with Dyslexia: Second Language Teachers' Concerns, Attitudes and Self-Efficacy Beliefs on A Massive Open Online Learning Course. *Teaching and Teacher Education* 68: 30-41.
- Kozinets RV (2015) *Netnography: Redefined*. Sage. London

- Krashen S (1992) The Input Hypothesis: An Update. *Linguistics and Language Pedagogy: The State of the Art*: 409-431
- Kress G (2009) *Multimodality: A Social Semiotic Approach to Contemporary Communication*. Routledge.
- Kress G (2011) *Multimodal Discourse Analysis from: The Routledge Handbook of Discourse Analysis* Routledge Available at:
<https://www.routledgehandbooks.com/doi/10.4324/9780203809068.ch3>
 [Accessed 23 Feb 2019]
- Kress G and Van Leeuwen T (2001) *Multimodal Discourse: The Modes and Media of Contemporary Communication*. Edward Arnold.
- Kress GR and Van Leeuwen T (1996) *Reading Images: The Grammar of Visual Design*. Psychology Press.
- Kreuter MW, Green MC, Cappella JN, Slater MD, Wise ME, Storey D, Clark EM, O'Keefe DJ, Erwin DO and Holmes K (2007) Narrative Communication in Cancer Prevention and Control: A Framework to Guide Research and Application. *Annals of Behavioral Medicine* 33(3): 221-235
- Kruger J-L, Hefer E and Matthew G (2014) Attention Distribution and Cognitive Load in a Subtitled Academic Lecture: L1 vs. L2. *Journal of Eye Movement Research* 7(5)
- Kumar N and Benbasat I (2002) Para-Social Presence and Communication Capabilities of a Web Site: A Theoretical Perspective. *E-Service Journal* 1(3): 5-24
- Kurniawati F, De Boer AA, Minnaert AEMG and Mangunsong F (2017) Evaluating The Effect of A Teacher Training Programme on The Primary Teachers' Attitudes, Knowledge and Teaching Strategies Regarding Special Educational Needs. *Educational Psychology* 37(3): 287-297.
- Lang and Upah (2008) In Ajoku-Christopher OA (2012) *Factors Influencing the Lack of Dyslexia Awareness and its Impact on Inclusive Learning in Selected Primary Schools in Owerri West Local Government Area, Imo State, Nigeria*. University of Greenwich University.
- Lasswell HD (1948) The Structure and Function of Communication in Society. In McQuail D and Windahl S (2015) *Communication Models for the Study of Mass Communications*. Routledge.
- Laurillard D and Masterman E (2009) TPD as Online Collaborative Learning for Innovation in Teaching. *Online Learning Communities and Teaching Professional Development: Methods for Improved Educational Delivery*: 230-246

- Laurillard D, Stratfold M, Luckin R, Plowman L and Taylor J (2000) Affordances for Learning in a Non-Linear Narrative Medium. *Journal of Interactive Media in Education* 2000(2)
- Lavine H and Snyder M (1996) Cognitive Processing and The Functional Matching Effect in Persuasion: The Mediating Role of Subjective Perceptions of Message Quality. *Journal of Experimental Social Psychology* 32(6): 580-604
- Lee J, Park D-H and Han I (2008) The Effect of Negative Online Consumer Reviews on Product Attitude: An Information Processing View. *Electronic Commerce Research And Applications* 7(3): 341-352
- Lee LW (2008) Development And Validation of a Reading-Related Assessment Battery in Malay for the Purpose of Dyslexia Assessment. *Annals of Dyslexia* 58(1): 37-57
- Lee LW and Low HM (2014) The Evolution of Special Education in Malaysia. *British Journal of Special Education* 41(1): 42-58
- Lee LW, Wheldall K, Beaman R and Madelaine A (2009) A Conceptual Framework for Remedial Reading Instruction for Low-Progress Early Readers in Malaysia. *Asia Pacific Journal of Speech, Language and Hearing* 12(1): 57-70
- Lerner JS and Keltner D (2000) Beyond Valence: Toward a Model of Emotion-Specific Influences on Judgement and Choice. *Cognition & Emotion* 14(4): 473-493
- Levine A and Cureton J (1992) The Quiet Revolution Eleven Facts about Multiculturalism and the Curriculum. *Change: The Magazine of Higher Learning* 24(1): 25-29
- Lingard B (2010) Policy Borrowing, Policy Learning: Testing Times in Australian Schooling. *Critical Studies in Education* 51(2): 129-147
- Lipman M (2003) *Thinking in Education*. Cambridge University Press
- Little AW (2001) Multigrade Teaching: Towards an International Research and Policy Agenda. *International Journal of Educational Development* 21(6): 481-497
- Liu G, Austen EL, Booth KS, Fisher BD, Argue R, Rempel MI and Enns JT (2005) Multiple-Object Tracking is Based on Scene, Not Retinal, Coordinates. *Journal of Experimental Psychology: Human Perception and Performance* 31(2): 235
- Liyanagunawardena TR, Adams AA and Williams SA (2013) MOOCs: A Systematic Study of the Published Literature 2008-2012. *The International Review of Research in Open and Distributed Learning* 14(3): 202-227

- Mackenzie, N. & Knipe, S. (2006). Research dilemmas: Paradigms, Methods and Methodology. *Issues In Educational Research*, 16(2), 193-205. Available at: on October 2017 from <http://www.iier.org.au/iier16/mackenzie.html>
- Madebydyslexia (2017) Available at: <https://madebydyslexia.blog/2017/08/16/dyslexic-thinking-skills-explained/> [Accessed 4 December 2018]
- Maheswaran D and Meyers-Levy J (1990) The Influence of Message Framing and Issue Involvement. *Journal of Marketing research*: 361-367
- Mak B, Schmitt BH and Lyytinen K (1997) User participation in knowledge update of expert systems. *Information & Management* 32(2): 55-63.
- Mantzavinos C (2016) Hermeneutics. Available at: <https://plato.stanford.edu/entries/hermeneutics/> [Accessed 26 February 2018]
- Margolin I (2011) Professional Development of Teacher Educators through a "Transitional Space": A Surprising Outcome of a Teacher Education Program. *Teacher Education Quarterly* 38(3): 7-25
- Marimuthu S and Cheong LS (2015) Inclusive Education for Social Transformation. *Procedia - Social and Behavioral Sciences* 172: 317-322
- Masitah T, Jelas MJ and Manisah MA (2009) Penglibatan Ibu Bapa dalam Pendidikan Kanak-kanak Berkeperluan Khas. *Pendidikan Kanak-kanak Berkeperluan Khas: Konsep dan Amalan*
- Mason M (2010). Sample Size and Saturation in PhD Studies Using Qualitative Interviews. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*. 11
- Matthes J (2009) What's in a frame? A Content Analysis of Media Framing Studies in the World's Leading Communication Journals, 1990-2005. *Journalism & Mass Communication Quarterly* 86(2): 349-367
- Mayer RE (2003) The Promise of Multimedia Learning: Using the Same Instructional Design Methods across Different Media. *Learning and Instruction* 13(2): 125-139
- Mayer RE and Moreno R (2002) Aids to Computer-Based Multimedia Learning. *Learning and Instruction* 12(1): 107-119
- Mayer RE and Sims VK (1994) For Whom as a Picture Worth a Thousand Words? Extensions of a Dual-Coding Theory of Multimedia Learning. *Journal of Educational Psychology* 86(3): 389
- Meyer KA (2003) Face-to-Face Versus Threaded Discussions: The Role of Time and Higher-Order Thinking. *Journal of Asynchronous Learning Networks* 7(3): 55-65.

- McGaan L (2016) Models of Communication Available at:
<https://department.monm.edu/cata/mcgaan/classes/cata101/Models-101.htm>
 [Accessed 15 May 2016]
- McKinney S, Carroll M, Christie D, Fraser C, Kennedy A, Reid L and Wilson A (2005) AERS: Learners, Learning and Teaching Network Project 2—Progress Report. *Paper Delivered at The Scottish Educational Research Association Annual Conference. Perth, Scotland: 24-26*
- McLaughlin MW and Mitra D (2001) Theory-Based Change and Change-Based Theory: Going Deeper, Going Broader. *Journal of Educational Change* 2(4): 301-323
- McQuail D and Windahl S (2015) *Communication Models For The Study Of Mass Communications*. Routledge.
- Mezirow J (1990) How Critical Reflection Triggers Transformative Learning. *Fostering Critical Reflection in Adulthood* 1: 20
- MoE (2004) The Development of Education: National Report Of Malaysia. *Paper Presented at the International Conference on Education, Geneva, September 8–11*. Government Circular.
- MoE (2010) *Peranan Guru Pemulihan Khas Dalam Pelaksanaan Program LINUS*. Available at: [https://www.MoE.gov.my/index.php/my/Peranan Guru Pemulihan Khas Dalam Pelaksanaan Program LINUS](https://www.MoE.gov.my/index.php/my/Peranan_Guru_Pemulihan_Khas_Dalam_Pelaksanaan_Program_LINUS). Government Circular. [Accessed 1 December 2017]
- MoE (2012) Program Pemulihan Khas. Available at:
https://www.MoE.gov.my/index.php/my/pendidikan-khas/program-pemulihan-khas_ Government Circular [Accessed 1 December 2017]
- MoE (2013) *Pelaksanaan Saringan LINUS 2.0 Bagi Literasi Bahasa Melayu dan Numerasi Murid Tahun 1, Tahun2 dan Tahun 3, 2013*. Malaysia. Available at:
[https://www.MoE.gov.my/index.php/my/ Pelaksanaan Saringan LINUS 2.0 Bagi Literasi Bahasa Melayu dan Numerasi Murid Tahun 1, Tahun2 dan Tahun 3, 2013](https://www.MoE.gov.my/index.php/my/ Pelaksanaan_Saringan_LINUS_2.0_Bagi_Literasi_Bahasa_Melayu_dan_Numerasi_Murid_Tahun_1, Tahun2 dan Tahun 3, 2013). Government Circular. [Accessed 1 December 2017]
- MoE (2016) *Perubahan Pelaksanaan Saringan LINUS 2.0 Mulai Tahun 2016 Bagi Sekolah Rendah Kementerian Pendidikan Malaysia*. Available at:
[https://www.MoE.gov.my/index.php/my/ Perubahan Pelaksanaan Saringan LINUS 2.0 Mulai Tahun 2016 Bagi Sekolah Rendah Kementerian Pendidikan Malaysia](https://www.MoE.gov.my/index.php/my/ Perubahan_Pelaksanaan_Saringan_LINUS_2.0_Mulai_Tahun_2016_Bagi_Sekolah_Rendah_Kementerian_Pendidikan_Malaysia) Government Circular. [Accessed 8 July 2017]
- MoE (2018a) Pemansuhan Pelaksanaan Linus Pendidikan Khas Di Sekolah Pendidikan Khas (SPK) dan Program Pendidikan Khas Integrasi (PPKI) Tahun 2019 Available at:
<https://www.MoE.gov.my/index.php/my/pemberitahuan-2019/4824-pemansuhan-pelaksanaan-linus-pendidikan-khas-di-sekolah-pendidikan-khas-spk->

- dan-program-pendidikan-khas-integrasi-ppki-tahun-2019. Government Circular. [Accessed 7 January 2019]
- MoE (2018b) Senarai Mata Pelajaran Teras KSSR Arus Perdana Bagi Sekolah Rendah Available at: http://www.data.gov.my/data/ms_MY/dataset/senarai-mata-pelajaran-teras-kssr-arus-perdana-bagi-sekolah-rendah [Accessed 2 October 2019]
- MoE (2019) *Garis Panduan Pendidikan Inklusif* [MoE portal] Available at: <https://www.moe.gov.my/en/muat-turun/pendidikankhas/program-pendidikan-inklusif/bahan-rujukan> [Accessed 29 March 2020]
- Moharana K, Biswas M and Reddemma K (2016) Assessment of Knowledge And Attitude of Trainee School Teachers Towards Identification and Management of Specific Learning Disabilities Children in Selected Training Institutions of Odisha. *PARIPEX-Indian Journal of Research* 4(10)
- Mollen S, Engelen S, Kessels LT and van den Putte B (2017) Short and Sweet: The Persuasive Effects of Message Framing and Temporal Context in Antismoking Warning Labels. *Journal of health communication* 22(1): 20-28
- Mooneyham BW and Schooler JW (2013) The Costs and Benefits of Mind-Wandering: A Review. *Canadian Journal of Experimental Psychology/Revue Canadienne De Psychologie Expérimentale* 67(1): 11
- Moore MG and Kearsley G (2011) *Distance Education: A Systems View of Online Learning*. Cengage Learning.
- Morgan SE and Cannon T (2003) African Americans' Knowledge about Organ Donation: Closing The Gap with More Effective Persuasive Message Strategies. *Journal of the National Medical Association* 95(11): 1066
- Morris P (2002) Promoting Curriculum Reforms in The Context of A Political Transition: An Analysis of Hong Kong's Experience. *Journal of Education Policy* 17(1): 13-28
- Moskal P, Dziuban C, Upchurch R, Hartman J and Truman B (2006) Assessing Online Learning: What One University Learned about Student Success, Persistence, and Satisfaction. *Peer Review* 8(4): 26
- Muhamad Nadhir AN and Alfa Nur Aini EE (2017) Special Education for Children with Disabilities in Malaysia: Progress And Obstacles *Geografia-Malaysian Journal of Society and Space* 12(10)
- Muhammad Shukri S (1998) *Beban Tugas Di Kalangan Guru Sekolah Rendah*. Universiti Utara Malaysia.
- Murphy E (1997) Constructivism: From Philosophy to Practice. Available at: <https://files.eric.ed.gov/fulltext/ED444966.pdf> [Accessed 18 January 2017]

- Murray C, Lombardi A, Wren CT and Keys C (2009) Associations between Prior Disability-Focused Training and Disability-Related Attitudes and Perceptions Among University Faculty. *Learning Disability Quarterly* 32(2): 87-100
- Norwich B and Lewis A (2001) Mapping a Pedagogy for Special Educational Needs. *British Educational Research Journal* 27(3): 313-329
- Norwich B (2007) *Dilemmas of difference, inclusion and disability: International perspectives and future directions*. Routledge.
- Norwich B, Richards A and Nash T (2010) Educational Psychologists and Children in Care: Practices and Issues. *Educational Psychology in Practice* 26(4): 375-390
- Novak JD (2002) Meaningful Learning: The Essential Factor for Conceptual Change in Limited or Inappropriate Propositional Hierarchies Leading to Empowerment of Learners. *Science Education* 86(4): 548-571
- O'Halloran KL (2011) Multimodal Discourse Analysis. *Continuum Companion to Discourse Analysis*: 120-137
- O'Reilly T (2005) What is Web 2.0 In Helen Margaret Donelan KK, Magnus Ramage (2010) *Online Communication and Collaboration: A Reader* (illustrated Edition). Routledge.
- Oblinger D, Oblinger JL and Lippincott JK (2005) *Educating the Net Generation*. Brockport Bookshelf. 272 Available at: <http://digitalcommons.brockport.edu/bookshelf/272> [Accessed 28 December 2016]
- Oliver M (2005) The Problem with Affordance. *E-Learning and Digital Media* 2(4): 402-413
- Oliver M and Barnes C (1998) *Disabled People and Social Policy: From Exclusion to Inclusion*. Addison Wesley Longman.
- Ong Luyee E et al. (2018) Suitability of the Literacy and Numeracy Screening (Linus) 2.0 Programme in Assessing Children's Early Literacy. *MOJES: Malaysian Online Journal of Educational Sciences* [S.I.] 3(2): 36-44 Available at: <<https://mojes.um.edu.my/article/view/12693>>. [Accessed 5 August 2018]
- Orehovec B and Alley M (2003) *Revisiting the Reading Workshop: A Complete Guide to Organizing and Managing an Effective Reading Workshop that Builds Independent, Strategic Readers*. New York: Scholastic Inc.
- Osborne J, Lewandowska-Tomaszczyk B and Kopytowska M (2016) *Languages, Cultures, Media*. Université Savoie Mont-Blanc. Available at: <https://hal.archives-ouvertes.fr/hal-01412764> [Accessed 12 September 2016]

- PADU MoE (2017) Malaysia Education Blueprint 2013-2035 Annual Report 2016. In Education PMo (ed) Putrajaya, Malaysia: Ministry of Education, Malaysia.
- Pajares MF (1992) Teachers' Beliefs and Educational Research: Cleaning Up a Messy Construct. *Review of Educational Research* 62(3): 307-332
- Parchoma G (2014) The Contested Ontology of Affordances: Implications for Researching Technological Affordances for Collaborative Knowledge Production. *Computers in Human Behavior* 37: 360-368
- Pauwels L (2012) A Multimodal Framework for Analyzing Websites as Cultural Expressions. *Journal of Computer-Mediated Communication* 17(3): 247-265
- Pei WC (2015) Moving Forward or Standing Still? A Reflection of 'Special' Educational Provision in Malaysia. *Discourse: Studies in the Cultural Politics of Education* 37(4): 600-613
- Peters H (2010) Mental Health: Special Needs and Education. *ASEAN Journal of Psychiatry* 11(1): 96-102
- Petras Y, Jamil H and Mohamed AR (2012) How Do Teachers Learn? A Study on the Policy and Practice of Teacher Professional Development in Malaysia. *KEDI Journal of Educational Policy* 9(1)
- Petty RE, Cacioppo JT and Goldman R (1981) Personal Involvement as a Determinant of Argument-Based Persuasion *Journal of Personality and Social Psychology* 41(5): 847.
- Petty RE and Cacioppo JT (1986) The Elaboration Likelihood Model of Persuasion. *Advances in Experimental Social Psychology* 19: 123-205
- Petty RE and Wegener DT (1998) Matching Versus Mismatching Attitude Functions: Implications for Scrutiny of Persuasive Messages. *Personality and Social Psychology Bulletin* 24(3): 227-240
- Petty RE, Briñol P, Tormala ZL and Wegener DT (2007) The Role of Meta-Cognition in Social Judgment. *Social Psychology: Handbook of Basic Principles* 2: 254-284
- Picard RW, Papert S, Bender W, Blumberg B, Breazeal C, Cavallo D, Machover T, Resnick M, Roy D and Strohecker C (2004) Affective Learning—a Manifesto. *BT Technology Journal* 22(4): 253-269
- Pierson M and Borthwick A (2010) Framing the Assessment of Educational Technology Professional Development in a Culture of Learning. *Journal of Computing in Teacher Education* 26(4): 126-131.

- Plass JL, Chun DM, Mayer RE and Leutner D (1998) Supporting Visual and Verbal Learning Preferences in a Second-Language Multimedia Learning Environment. *Journal of Educational Psychology* 90(1): 25
- Potter WJ (2013) *Media literacy*. Sage Publications
- Rahman AA and Woollard J (2019) Neurodiversity Awareness: Is Malaysia There Yet?. *International Journal of Evaluation and Research in Education*, 8(4), pp.676-685.
- Redlich-Amirav D and Higginbottom G (2014) New Emerging Technologies in Qualitative Research. *The Qualitative Report* 19(26): 1-14
- Reid G (2012) *Dyslexia and Inclusion: Classroom Approaches for Assessment, Teaching and Learning*. Routledge.
- Reid G (2016) *Dyslexia: A Practitioner's Handbook*. John Wiley & Sons
- Reid G (2019) *Dyslexia and Inclusion: Classroom Approaches for Assessment, Teaching and Learning*, 3rd ed. Routledge.
- Rice P and Ezzy D (1999). *Qualitative Research Methods: A Health Focus*. Melbourne: Oxford University Press.
- Riddick B (2001) Dyslexia and Inclusion: Time for a Social Model of Disability Perspective? *International Studies in Sociology of Education* 11(3): 223-236
- Rimrodt SL, Clements-Stephens AM, Pugh KR, Courtney SM, Gaur P, Pekar JJ and Cutting LE (2009) Functional MRI of Sentence Comprehension in Children with Dyslexia: Beyond Word Recognition. *Cereb Cortex* 19(2): 402-13
- Ritchie J, Lewis J, Nicholls CM and Ormston R. eds. (2013) *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Sage.
- Roberts D (2018) 'The message is the medium': Evaluating the Use of Visual Images to Provoke Engagement and Active Learning in Politics and International Relations Lectures *Politics* 38(2): 232-249.
- Robinson D and Goodey C (2018) Agency in the Darkness: 'Fear of the Unknown', Learning Disability and Teacher Education for Inclusion. *International Journal of Inclusive Education* 22(4): 426-440.
- Rose J (2006) *Independent Review of the Teaching of Early Reading*. Nottingham: DfES Publications

- Rothman AJ and Salovey P (1997) Shaping Perceptions to Motivate Healthy Behavior: The Role of Message Framing. *Psychological bulletin* 121(1): 3
- Roy R and Roy R (2017) The Effects of Regulatory Focus and Mixed Valence Imagery and Analytical Attributes on Product Decisions. *Marketing Intelligence & Planning* 35(3): 397-407
- Rucker DD and Petty RE (2006) Increasing the Effectiveness of Communications to Consumers: Recommendations Based on Elaboration Likelihood and Attitude Certainty Perspectives. *Journal of Public Policy & Marketing* 25(1): 39-52
- Russler DC, Schadow G, Mead C, Snyder T, Quade LM and McDonald CJ (1999) Influences of the Unified Service Action Model on the HL7 Reference Information Model. *Proceedings of the AMIA Symposium: American Medical Informatics Association*: 930
- Sachs J (2003) In Day C and Sachs J (2004). Professionalism, Performativity and Empowerment: Discourses in the Politics, Policies and Purposes of Continuing Professional Development. *International Handbook on the Continuing Professional Development of Teachers*.
- Sahlberg P (2007) Education Policies for Raising Student Learning: The Finnish Approach. *Journal of Education Policy* 22(2): 147-171
- Samuel RJ and Bakar ZA (2007) Do Teachers Have Adequate ICT Resources and the Right ICT Skills in Integrating ICT Tools in the Teaching And Learning Of English Language In Malaysian Schools? *The Electronic Journal of Information Systems in Developing Countries* 29
- Santur Y, Karaköse M and Akin E (2016) Improving of Personal Educational Content Using Big Data Approach for Mooc in Higher Education. *Information Technology Based Higher Education and Training (ITHET), 2016 15th International Conference*: IEEE 1-4
- Sapienza ZS, Iyer N and Veenstra AS (2015) Reading Lasswell's Model of Communication Backward: Three Scholarly Misconceptions. *Mass Communication and Society* 18(5): 599-622
- Saravanabhavan S and Saravanabhavan R (2010) Knowledge of Learning Disability among Pre-and In-Service Teachers in India. *International Journal of Special Education* 25(3): 132-138
- Scheufele DA (1999) Framing as a Theory of Media Effects. *Journal of communication* 49(1): 103-122.

- Schlager MS and Fusco J (2003) Teacher Professional Development, Technology, and Communities of Practice: Are We Putting the Cart Before the Horse? *The Information Society* 19(3): 203-220
- Schleicher A (2017) Seeing education through the prism of PISA. *European Journal of Education*, 52(2), pp.124-130.
- Schooler JW, Smallwood J, Christoff K, Handy TC, Reichle ED and Sayette MA (2011) Meta-Awareness, Perceptual Decoupling and The Wandering Mind. *Trends in Cognitive Sciences* 15(7): 319-326
- Selamat Pagi Malaysia (2019) Zero Reject Policy Untuk Murid Berkeperluan Khas [Broadcast 2019]. RTM 1, first transmitted January 7.
- Sesma HW, Mahone EM, Levine T, Eason SH and Cutting LE (2009) The Contribution of Executive Skills to Reading Comprehension. *Child Neuropsychology* 15(3), pp.232-246.
- Shannon and Weaver (1949) In McQuail D and Windahl S (2015) *Communication models for the study of mass communications*. Routledge.
- Sharifah S, Suhaida A and Soaib A (2014) Workload of Technical Secondary School Teachers: Management and Administration's Perceptions. *Malaysian Online Journal of Educational Management* 2(4): 21-35
- Shaywitz BA, Shaywitz SE, Pugh KR, Mencl WE, Fulbright RK, Skudlarski P, Constable RT, Marchione KE, Fletcher JM, Lyon GR and Gore JC (2002) Disruption of Posterior Brain Systems for Reading in Children with Developmental Dyslexia. *Biological Psychiatry* 52(2): 101-110.
- Shaywitz SE and Shaywitz BA (2005) Dyslexia (Specific Reading Disability). *Biological Psychiatry* 57(11):1301-1309.
- Sheer VC and Chen L (2004) Improving Media Richness Theory a Study of Interaction Goals, Message Valence, And Task Complexity in Manager-Subordinate Communication. *Management Communication Quarterly* 18(1): 76-93
- Shen F, Sheer VC and Li R (2015) Impact of Narratives in Persuasion in Health Communication: A Meta-Analysis. *Journal of Advertising* 44(2): 105-113
- Shiv B, Edell Britton JA and Payne JW (2004) Does Elaboration Increase or Decrease the Effectiveness of Negatively Versus Positively Framed Messages? *Journal Of Consumer Research* 31(1): 199-208
- Sibtain A (2013) Training Teacher's in Early Identification and Management of Specific Learning Difficulties (SPLD) In Mainstream Pakistani School. *JPPS* 10(2): 72-76

- Smedley A (2010) Review: Issues with E-Learning in Nursing and Health Education in The UK: Are New Technologies Being Embraced in The Teaching and Learning Environments? *Journal of Research in Nursing*
- Smith SM and Petty RE (1996) Message Framing and Persuasion: A Message Processing Analysis. *Personality and Social Psychology Bulletin* 22(3): 257-268
- Smythe I, Everatt J and Salter R (2005) The International Book of Dyslexia: A Guide to Practice and Resources. John Wiley & Sons.
- Snowling MJ (2013) Early Identification and Interventions for Dyslexia: A Contemporary View. *Journal of Research in Special Educational Needs* 13(1): 7-14.
- Srivasta M, de Boer AA and Pijl SJ (2017) Preparing for the Inclusive Classroom: Changing Teachers' Attitudes and Knowledge. *Teacher Development* 21(4): 561-579.
- Stark HL, Snow PC, Eadie PA and Goldfeld SR (2016) Language and Reading Instruction in Early Years' Classrooms: The Knowledge and Self-Rated Ability of Australian Teachers. *Annals of dyslexia* 66(1): 28-54.
- Stojiljković S, Djigić G and Zlatković B (2012) Empathy and Teachers' Roles. *Procedia - Social and Behavioral Sciences* 69: 960-966
- Stojiljković S, Todorović J, Đigić G and Dosković Z (2014) Teachers' Self-Concept and Empathy. *Procedia-Social and Behavioral Sciences* 116: 875-879
- Sweller J (1999) Instructional Design. *Australian Educational Review: Citeseer*
- Sweller J, Van Merriënboer JJ and Paas FG (1998) Cognitive Architecture and Instructional Design. *Educational Psychology Review* 10(3): 251-296
- Sylvia CHL (2009) Primary School Teachers' Awareness on Dyslexia and Management of Students with Dyslexia in Kuching Division.
- Taib MNM (2008) School Management Concerning Collaboration with Social Resources in Community: Its' Approaches and Problems. *Primary and Middle Years Educator* 6(2): 9-12
- Taylor J and Pagliari C (2018) Mining social media data: How are research sponsors and researchers addressing the ethical challenges?. *Research Ethics*, 14(2): 1-39
- Temple B, Edwards R and Alexander C (2006) *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 7(4):Art 10 Available at: <http://nbnresolving.de/urn:nbn:de:0114-fqs0604107>. [Accessed 7 April 2017]

- Teoh H, Cheong S and Woo P (2008) Student Learning Disability Experiences, Training and Services Needs of Secondary School Teachers. *Malaysian Journal of Psychiatry* 17(2)
- Thomason ME (2009) Children in Non-Clinical Functional Magnetic Resonance Imaging (fMRI) Studies Give the Scan Experience a “Thumbs Up”. *American Journal of Bioethics* 9(1):25–7.
- Tousch AM, Herbin S and Audibert JY (2012) Semantic Hierarchies for Image Annotation: A Survey. *Pattern Recognition* 45(1): 333-345
- Tuchman G (1980) Who cares who says what to whom ... ? In Sapienza ZS, Iyer N and Veenstra AS (2015) Reading Lasswell's Model of Communication Backward: Three Scholarly Misconceptions. *Mass Communication and Society* 18(5): 599-622
- Tykcinski O, Higgins ET and Chaiken S (1994) Message Framing, Self-Discrepancies, and Yielding to Persuasive Messages: The Motivational Significance of Psychological Situations. *Personality and Social Psychology Bulletin* 20(1): 107-115
- Unesco (1994) The Salamanca Statement on Principles, Policy And Practice in Special Needs Education.
- Unesco (2013) Review MEP: Malaysia Education Policy Review, Abridged Report. Paris: UNESCO
- Van Driel JH, Beijaard D and Verloop N (2001) Professional Development and Reform in Science Education: The Role of Teachers' Practical Knowledge. *Journal of Research in Science Teaching* 38(2): 137-158
- Van Klinger M, Boomgaarden HG and de Vreese CH (2017) Will Conflict Tear Us Apart? The Effects of Conflict and Valenced Media Messages on Polarizing Attitudes toward EU Immigration and Border Control. *Public Opinion Quarterly* 81(2): 543-563
- Villa RA, Van Tac L, Muc PM, Ryan S, Thuy NTM, Weill C and Thousand JS (2003) Inclusion in Viet Nam: More Than a Decade of Implementation. *Research and Practice for Persons with Severe Disabilities* 28(1): 23-32
- Villegas-Reimers (2003) Teacher Professional Development an International Review from the Literature. Paris: International Institute for Educational Planning.
- Vivitsou M, Lambropoulos N, Konetas D, Paraskevas M and Grigoropoulos E (2008) The Project Method E-Course: The Use of Tools Towards the Evolution of The Greek Teachers' Online Community. *International journal of continuing engineering education and life long learning* 18(1): 26-39

- Vliegenthart R and Van Zoonen L (2011) Power to The Frame: Bringing Sociology Back to Frame Analysis. *European Journal of Communication* 26(2): 101-115
- Weick KE, Sutcliffe KM and Obstfeld D (2005) Organizing and the Process of Sensemaking. *Organization Science* 16(4): 409-421
- Weiner B (1980) A Cognitive (Attribution)-Emotion-Action Model of Motivated Behavior: An Analysis of Judgments of Help-Giving. *Journal of Personality and Social Psychology* 39(2): 186
- West TG (2009) *In the Mind's Eye: Creative Visual Thinkers, Gifted Dyslexics, and The Rise of Visual Technologies*. Prometheus Books.
- Wiener Y (1988) Forms of Value Systems: Focus on Organizational Effectiveness and Cultural Change and Maintenance. *Academy of Management Review* 13(4): 534-545
- Willis JW and Jost M (2007) *Foundations of Qualitative Research: Interpretive and Critical Approaches*. Sage
- Wilson DK, Purdon SE and Wallston KA (1988) Compliance to Health Recommendations: A Theoretical Overview of Message Framing. *Health Education Research* 3(2): 161-171
- Wood W (2000) Attitude change: Persuasion and Social Influence. *Annual Review of Psychology* 51(1): 539-570
- Young H (2016) Perceived Lack of Teacher Empathy and Remedial Classroom Conflicts. A Phenomenological Study. Nova Southeastern University.
- Youssoof O (2008) Speech Given at UNICEF's Support for Children with Special Educational Needs. *Paper Presented at the Second National Early Childhood Intervention Conference, Sabah, Malaysia*.
- Yui L, Ng R and Perera-WA H (2017) Concrete vs Abstract Words—What Do You Recall Better? A Study on Dual Coding Theory. PeerJ Preprints
- Yusof YM and Zakaria E (2010) Investigating Secondary Mathematics Teachers' Pedagogical Content Knowledge: A Case Study. *Journal of Education and Sociology* 1(1): 32-39
- Zadina JN (2015) The emerging role of educational neuroscience in education reform. *Psicología Educativa*, 21(2), pp.71-77.

Zhao H (2016) *Cross-Cultural Audience Comprehension and Engagement: A Study of The Effects of Data Visualization*. University of Missouri Columbia University

